



## OVERSEAS NEWS

## Airlifted Ethiopian Jews fear for safety of relatives

BY DAVID LENNON IN TEL AVIV

ETHIOPIAN JEWS airlifted to Israel in a rescue operation in the past two months have expressed fears for the safety of their relatives in Ethiopia, after worldwide publicity about the operation.

The Israeli Cabinet held a lengthy debate yesterday on how to rescue the Jews remaining in Ethiopia and the Sudan, and about how to secure their successful integration into Israeli society.

The Cabinet discussion was held in the framework of a ministerial defence committee, which prohibits the publication of any details of that debate.

The Israeli Council for Ethiopian Jewry attacked the Israeli Government for having publicised the secret mission, code-named "Operation Moses", which has airlifted almost 7,000 Jews to Israel since the beginning of November.

The council expressed concern about reprisals against the estimated 8,000 to 10,000 Jews still left in Ethiopia or in Sudanese refugee camps, where they are waiting for flights.

About 7,000 Jews had been secretly transferred to Israel during the past three years. This project was stepped up at the beginning of November when the extent of the famine was known.

The rescue mission has been stopped, at least temporarily, by the decision of Trans European Airways, the Belgian charter company carrying out the airlift to suspend the operation. The last TEA flight carrying immigrants from Ethiopia arrived in Israel on Saturday.

An official of the Jewish Agency, the body which deals with immigration, said yesterday that other airlines had expressed willingness to take over the airlift, but pointed out that was not the key problem. Sudan had apparently refused to be used as a pick-up point.

The airline said the widespread publicity about what had been a secret operation had made it impossible to continue.

The Cabinet, and especially Mr Shimon Peres, the Prime Minister, has been sharply criticised in many quarters for having publicly confirmed the existence of the airlift and thereby having created the situation which led to its suspension.

The right-wing opposition party, Tehiya, has tabled a motion of no-confidence in the Government because of the publicity which it gave to the airlift to rescue Ethiopian Jews.

## Warsaw outlines plans for increases in food prices

THE POLISH Government outlined plans over the weekend to raise the prices of most foods in March, but called for a month-long period of consultations on the increases to curb worker unrest.

The Government gave no advance notice of food price increases in 1979 and 1978, sparking protests in Gdansk and other cities, or in 1980 when nationwide strikes led to the birth of the now-outlawed Solidarity free trade union.

A Government communiqué published in all major newspapers said price increases were necessary "to make up for the general growth in the costs of food production," but said the rises could eliminate the rationing of some basic foods.

The Government outlined three sets of proposed price rises for "social consultations" that would raise prices for meat by as much as 15 per cent and for other basic foodstuffs from 3 per cent to 80 per cent.

The three proposals ranged from large price increases and an end to most rationing except for meat to smaller price rises with most rationing continuing.

At the same time, the Government announced that prices for coal, electricity and gas would increase 20-30 per cent in April.

The Government said that under the 1983 central plan, retail prices overall would increase 12-13 per cent and would be offset by similar wage increases.

Last January the Government introduced food price increases averaging 10 per cent without triggering serious unrest following unprecedented public consultations conducted by new official trade unions, the state-run media and the government's office for prices.

Solidarity underground leaders urged workers to resist the price increases last year but never called for demonstrations.

Another development, Polish newspapers published the Government's draft proposals on voting regulations for parliamentary elections in the autumn. The elections were postponed last year.

Under the proposals, there are to be two candidates for most of the 460 seats in parliament, but only the Communist Party and other official organisations have the right to select candidates.

The proposed voting regulations are similar to those for last June's local council elections in which the Government said turnout averaged 75 per cent.

In announcing the consultations on food price rises, the Government said it would hold a meeting on Thursday with leaders of the official national trade union organisation.

## Charter 77 members freed

SEVEN prominent members of the Charter 77 human rights group, detained in Prague on Thursday four days before the eighth anniversary of the charter's publication, have been released, Reuter reports from Vienna.

The five men and two women included dissident author Mr Václav Havel, charter officials Mr Václav Benda, Mr Jiří Ruml and Mr Ján Šternová, and ex-journalist Mr Jiří Dienstbier.

Mr Benda, Mr Ruml, and Mr Havel and Mr Dienstbier were released after police questioning. The other were allowed to go home on the day of their detention, emigre sources said. There was no official comment on the action.

Signatories have been picked up for questioning frequently in the past. The group issues statements on human rights and other issues, which are sent to the Czechoslovak authorities and made available to Western reporters.

Its latest statement, issued last month, accused the official Czechoslovak media of not telling the truth and keeping people in ignorance of important information.

The group's manifesto appeared in Western newspapers on January 7 1977.

## An important message to shareholders from Seltrust Holdings Limited.

(INCORPORATED IN WESTERN AUSTRALIA)

By now, you should have received a booklet outlining the terms of a proposed Scheme of Arrangement between Seltrust Holdings Limited and its members.

Members are reminded of the meetings to consider this Scheme and a related reduction of capital of the Company to be held on 22 January 1985 at the Sheraton-Perth Hotel, 207 Adelaide Terrace, Perth, Western Australia commencing at 10.00 am local time. If members wish to appoint a proxy to attend the meetings, proxy forms and any power of attorney under which they are executed must be lodged at the registered office of the Company, 200 Adelaide Terrace, Perth, Western Australia, 6000, not less than 48 hours before the relevant meeting.

If you have not received a copy, please contact the Company Secretary at the registered office, telephone Perth, Australia 325 4511 or telex A493788, who will then arrange to have a further copy despatched urgently to you.

Copies of the document are also available from the Company Secretary, BP Minerals International Limited, Selection Trust Building, Masons Avenue, Coleman Street, London EC2V 5BU, telephone 01-606 6000 telex 886852.

## U.S. car makers raise sales by 17%

By Paul Taylor in New York

U.S. CAR MAKERS sold more than 7.9m domestically produced vehicles last year, 0.17 per cent increase over 1983.

The late December sales figures, however, showed a small and slightly disappointing 2 per cent decline on the previous year. The seasonally adjusted annual sales rate in the final days of the year was 8m, compared with 8.3m units in the 1983 period.

The decline did not detract from what has been a bumper selling year for most of the six domestic U.S. car makers. It has been their second consecutive growth year after the recession.

The biggest gains last year were made by Chrysler, which saw sales of domestically produced cars increase by 36 per cent to 849,796 units and by Honda's U.S. operations which sold 133,601 cars compared with 50,402 in 1983.

Among the leading motor manufacturers, General Motors posted a 13.5 per cent year-on-year gain, selling 4,600,512 cars last year compared with 4,053,561 in 1983 and holding on to a commanding 56 per cent market share, compared with 59.5 per cent in 1983. Ford reported a 26 per cent increase in 1984 sales to 1,979,317 cars.

Of the six domestic manufacturers, only American Motors and VW showed slight declines in the number of domestically produced cars they sold.

Last year also proved a good one for the importers. BMW posted a 19.7 per cent gain in sales to 59,243, while Jaguar's sales grew 14.1 per cent to 18,044.

Among the Japanese car manufacturers the impact of U.S. import quotas was, however, beginning to be felt. Toyota, for example, reported that sales in the U.S. limited by import restrictions grew by a modest 0.4 per cent to 557,981 units last year.

The United Auto Workers' council of delegates representing Chrysler members have voted against insisting on early contract talks. The UAW's contract with Chrysler is due to expire in October.

Swiss airforce to exercise in Sardinia

By Anthony McDermott in Bern

THE SWISS AIR FORCE begins 11 days of exercises in Sardinia today—the first by Switzerland outside the territories of such neutral nations as Austria and Sweden.

The fact that it takes place in a Nato country has evoked criticism from those who fear that Switzerland's armed forces are gradually being integrated into Nato's military system. West German, Italian, French, British and American pilots have also trained at the Decimomannu base on the island, where strict security is in force for the Swiss visit.

Colonel Ernst Wyler, the airforce commander, however insists that this exercise involving six Mirage 3s, six F-5s and 33 pilots is not in military uniform—is a purely commercial bilateral deal with the Italian Government, costing about SwFr 1m (\$333,000), and with the U.S. Corporation (CO) of the U.S. The company runs sophisticated facilities for ground attack and dogfight exercises at the base which can be recorded, replayed and analysed.

One additional reason for moving to Sardinia is the number of restrictions imposed on air force flying in Switzerland.

## Turkish minister to face corruption probe

By David Barchard in Ankara

ONE OF Mr Turgut Ozal's "inner cabinet," Mr Ismail Oztas, Minister of State, has resigned and is being investigated on corruption charges, the Prime Minister's office announced at the weekend.

Mr Oztas, 34, was the youngest member of Turkey's Ocal government and was used by the Prime Minister as a trouble shooter in energy problems.

This is the second set of Government resignations in less than four months.

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## WORLD STOCK MARKETS

CHECK EVERY DAY IN THE FT

## India battles to rescue tourist industry

BY LARRY KLINGER IN NEW DELHI

INDIA IS launching a post-election campaign to rescue its economically vital tourist industry.

The hope is that, with political continuity demonstrated by last month's general elections—the most conclusive and peaceful of the eight held since independence in 1947—the country can reverse the slump in tourist arrivals. They have declined by a quarter since Mrs Indira Gandhi's assassination in October.

If the campaign proves unsuccessful, not only will much important foreign currency have been lost, but the industry will have to face nearly a year of uncertainty before the high season resumes next October. Tourism, with an annual income of \$550m, is India's largest net earner of foreign exchange.

Dr Nitish Sengupta, Director General for Tourism at the Ministry for Tourism and Civil Aviation, said in an interview at the weekend that the Government was making a major effort to counter the "adverse publicity" arising from the assassination, the subsequent Hindu-Sikh violence and the Bhopal gas leak tragedy.

The Government is to expand its first-ever foreign television advertising campaign, send high level delegations abroad and brief groups of journalists and tour operators to India to see for themselves that "everything has returned to normal."

About \$45,000 has already been set aside for the television campaign, initially aimed at Britain, and another \$60,000 has been approved, half of which is to come from the Government with the rest being provided by tour operators.

In addition Dr Sengupta says the Ministry has been assured that its 1985 tourist budget of Rs 60m (about \$4m) is to be more than doubled to Rs 180m by the new Cabinet headed by Prime Minister Rajiv Gandhi. Mr Gandhi has retained for himself the portfolio for

whose reputation as an effective arm of the Government has slipped in the past few years. The Commission will soon finalise India's new seventh five year plan.

The Prime Minister is the chairman of the commission and the planning minister is often the deputy chairman. The appointment of Dr Singh, a highly respected former finance secretary, should bring new authority to the organisation.

Dr Arjun K. Sengupta, special secretary in the Prime Minister's office, will succeed Mr Malhotra of the World Bank.

Tourism and Civil Aviation. The main problem, he says, is to convince U.S. travellers, the "big spenders," that normality had returned and that the Bhopal incident was a very isolated one. "Somewhere," Dr Sengupta says, "we must convince the Americans that not everything east of Connecticut has been contaminated."

With India now back to normal, however, Mr Sengupta is confident that the country's tourist industry will resume its buoyancy well before the current high season ends in March. Hoteliers and tour operators are expressing optimism but admit that there is as yet

no real evidence that a significant upturn is imminent. "There is no reason why things should not improve this month and next," said a leading hotel chain executive, "but we will just have to wait and see."

Without a sharp upturn, however, the outlook will remain grim. A slowdown in cancellations is becoming apparent but figures for December are expected to be little better than November, which showed a 26.3 per cent fall in tourist arrivals compared with the same month a year before.

Bookings at hotels aimed at the business traveller are holding up. "We have had a big increase in businessmen wanting to establish contacts with the new government," said a hotel executive, "but tourist hotels in areas where accommodation is readily available are still experiencing occupancy rates of between 60 and 80 per cent against the 100 per cent norm for this time of year."

Registrations for international conferences were reportedly down by 70 per cent over the past two months, one hotel group is estimated to have lost Rs 20m due to cancellations in November and December, and one of the country's top five travel agents is uncertain whether it will lose Rs 10m in November alone.

## Israeli cabinet orders bank crisis inquiry

BY DAVID LENNON IN TEL AVIV

THE ISRAELI Cabinet yesterday decided that a commission of inquiry must be set up to investigate the bank share crisis of October, 1983, in which thousands of Israelis lost their savings and which threatened the stability of the country's commercial banks.

The cabinet appointed a ministerial committee headed by Mr Shimon Peres, the Prime Minister, to decide on the terms of reference of the commission.

The decision to launch a full-scale inquiry followed a scathing report from the State Comptroller about the behaviour of the Government, the Central Bank and other state agencies, which allowed the commercial banks to manipulate the price of their shares on the Tel Aviv stock exchange for 11 years.

A massive run on bank shares in September and early October, 1983, by a public fearing a large devaluation of the shekel left the banks unable to raise sufficient funds to buy up their shares and thus maintain their price.

Trading on the stock exchange was suspended on October 6, 1983, and the Government was forced to come

to the rescue of shareholders by guaranteeing the dollar-linked price of the shares if held for five years. The comptroller estimated that the rescue operation will eventually cost the Government \$2.5bn (£220m).

The comptroller's report, published on December 31, 1983, not only castigated the behaviour of the Treasury and the Bank of Israel but also lashed out at the banks for what is described as "manipulative regulation" of their shares.

Some ministers opposed the

inquiry. Mr Avraham Shafir, the Tourism Minister, said that a Commission of Inquiry could result in the public losing confidence in the Israeli banking system. He said that even without a commission those responsible could be forced to resign.

Israel's Supreme Court yesterday upheld a ban barring an Israeli Government minister from testifying on the character of cabinet colleague Mr Ariel Sharon, who is fighting a libel suit against a magazine, court officials said. Reuter reports from Tel Aviv.

## Jordan to receive defence weapons from Russia

BY OUR FOREIGN STAFF

JORDAN IS to receive sophisticated ground and air defence weapons from the Soviet Union this year, General Sherif Zaid bin Shaker the Jordanian army commander announced over the weekend.

He said the deal was concluded last year following the loss of the U.S. last year to sell Jordan anti-aircraft "stinger" missiles because of Israeli objections.

Jordan has traditionally been equipped by the U.S. but following the rebuff over stingers, Jordan looked elsewhere and held talks with British, French and Italian defence officials, as well as the Soviet Union.

The weekend also saw a surprise visit to Jordan by Mr Hosni Mubarak, the Egyptian President, for talks with King Hussein amid increasing Jordanian efforts to get a new Middle East peace effort underway.

Mr Mubarak, on his second visit to Jordan in less than three months, was greeted at the airport in the Red Sea port of Aqaba by King Hussein.

The two men went to the King's newly summer palace for talks. No details were given of the talks but a discussion between the King and Sig Giulio Andreotti, the Italian Foreign Minister Italy has been pressing for a European initiative for peace negotiations between Israel and its Arab neighbours.

The Mubarak-Hussein talks also followed a two-day session King Hussein held with Mr Yasser Arafat, the Chairman of the Palestine Liberation Organisation (PLO) with whom the monarch hopes to form a common Middle East policy.

## Philippine rebels seize ammunition from village

BY EMILIA TAGAZA IN MANILA

ABOUT 500 Communist rebels occupied a southern Philippine village for two hours last Friday and seized arms and ammunition from local policemen, militiamen and security guards.

The Philippines armed forces headquarters in Manila said the rebels of the New People's Army (NPA), the military wing of the Communist Party of the Philippines, entered the fishing village of Tabina in Zamboanga Del Sur province, disguised in military uniform.

They took 100 firearms, thousands of rounds of ammunition, and some office equipment. The military said the rebels escaped in a cargo truck, a jeep and a motorcycle they commandeered from the village.

The raid on Tabina village is the latest major operation staged by the NPA in an apparent effort to build up its arsenal. Last month another NPA group attacked an oil palm plantation also in the southern Philippines and released the estate's security guards.

Communist insurgency has been identified by the Government as the major threat to the country's security.

There is some debate as to how strong the NPA's influence is in the countryside, and as to how real is the threat it poses on Government control in the provinces, but military documents indicate they are gaining ground in 60 out of the 73 provinces in the country. The Philippine military admits that the NPA is now daring enough to launch attacks and ambushes with 250 to 300 armed men.

The Government says fully armed NPA members are more than 10,000. But NPA documents claim full-time soldiers of up to 20,000.

## Son Sann makes surprise visit to battle zone base

BY OUR FOREIGN STAFF

MR SON SANN, the Kampuchean nationalist guerrilla leader, made a surprise visit over the weekend to his key base of Ampil currently being assaulted by the Vietnamese forces occupying Kampuchea.

Mr Son Sann, who is President of the Khmer People's National Liberation Front (KPNLF), one of three resistance groups fighting the Vietnamese-backed regime of Heng Samrin in Kampuchea, told an impromptu press conference in Ampil close to the Thai border that the Vietnamese might attack again today to mark the sixth anniversary of their intervention in Kampuchea.

Amplil, the command headquarters of the KPNLF, is its only major base still left intact since Vietnamese troops began a dry season offensive along the western Kampuchean border last November.

In preparation for the expected assault trenches and fortified bunkers have been built and guerrillas have received fresh supplies of Chinese anti-tank guns and mortars.

Son Sann said that since the Vietnamese offensive began 100 guerrillas had been killed and 467 wounded. "Our losses run into hundreds, but their runs into thousands," he said.

Vietnam's communist party newspaper Nhan Dan claimed about 10,000 guerrillas and several of their sanctuaries have been put out of action during the past year.

## Eastern Airline directors back wage cuts decision

BY PAUL TAYLOR IN NEW YORK

EASTERN AIRLINE'S outside directors have given the U.S. airline's management a strong endorsement for its controversial decision to extend a package of employee wage concessions which were due to expire on December 31.

The backing for Mr Frank Borman, Eastern's chairman, came at a special board meeting called to consider the management's decision to extend 18 to 22 per cent wage cuts agreed by the airline's unionised employees last year in return for a 25 per cent equity stake.

The move has angered Eastern's union leaders who also have board representation and who based on impassioned plea for reconsideration at the special board meeting.

The move seems likely to increase tension between the airline and its unions.

Mr Charles Bryan, president and chairman of Eastern's largest union, which represents 12,000 members of the international machinists and aerospace workers, said after the meeting, "I am extremely disappointed. I advised them that they left us no alternative but to go to court."

Mr John Fallon, chairman of the airline's executive committee, said after the board meeting that the "historic" concessions-for-equity package had helped Eastern begin its long-awaited turnaround.

## Kennedy sparks controversy in S. Africa

BY ANTHONY ROBINSON IN JOHANNESBURG

U.S. SENATOR Edward Kennedy sparked a highly scheduled tour of South Africa yesterday by attending Mass at St Peter's Church in the black township of Soweto and addressing black workers at an all-male hostel for migrant workers.

He told the workers that a system which forced them to choose between living with their families or providing for them was both harsh and unjust.

The eight-day visit, which retraces a earlier pilgrimage to South Africa made by his late brother, Senator Bobby Kennedy, 18 years ago, has stirred up controversy among black political groups. It has also aroused Government fears that it will lead to a campaign by U.S. and other foreign companies.

On his arrival at Johannesburg's Jan Smuts Airport on Saturday night, Senator Kennedy was greeted by Archbishop Desmond Tutu and by the Rev Alan Roesak, president of the World Alliance of Reformed Churches and leader of the anti-apartheid United Democratic Front (UDF).

He was also met by a group of demonstrators from the Azanian People's Organisation (AZAPO), a radical black consciousness group, who waved banners saying "Kennedy go home."

Furthering his future presidential ambitions, rather than the interests of the oppressed black majority.

Sen Kennedy has asked for meetings with both Government and opposition leaders, including the leaders of the banned African National Congress (ANC), Mr Nelson Mandela and

Mr Walter Sisulu, who are serving life sentences in the Robben Island prison.

Today, he is expected to meet Mr P. Botha, the Minister of Foreign Affairs, in Pretoria, before visiting two black areas where the inhabitants are threatened with removal.

He is also scheduled to meet prominent white businessmen, including Mr Gavin Kelly, the chairman of Anglo American Corporation, and leading black trade unionists.

Among the union leaders are Mr Cyril Ramaphosa, leader of the black Mine Workers' Union, Mr Piroshaw Camay, and other leaders of the main black union federations who were imprisoned briefly after the successful two-day strike in the Transvaal in November and who face lengthy political trials later this month.

Mr Kennedy's itinerary will also take him to north of Bloemfontein, where he will meet Mrs Winnie Mandela, the banned wife of the ANC leader, before flying to Durban.

There he will meet the Rev Dennis Hurley, the Archbishop of Durban, who faces trial for his criticism of police actions in Namibia and who recently released a report which strongly criticised alleged police brutality during the riots which ended the Vaal townships last autumn.

Sen Kennedy will also meet Chief Gatsha Buthelezi, the Zulu chief, whose refusal to bow in Government efforts to turn KwaZulu into another "homeland," while criticising the UDF and other radical black organisations, has given him a meek and timid status, which commands a mixture of respect and irritation from white and black alike.

## Peru starts paying overdue interest

By Peter Montagna, Euromarkets Correspondent

PERU has started paying about \$52m (\$45m) in overdue interest to its commercial bank creditors in an effort to keep its arrears from reaching beyond the critical 180-day mark.

The payment, which Peru had originally promised to make before the end of the year, would bring its interest payments up to date as of the first week of July last year.

Bankers hope that it will be enough to prevent a further official downgrading of Peru's debts by U.S. government agencies responsible for supervising the banking system. Such a move could mean banks being required to set aside loan loss provision against their exposure to Peru.

But with revealing arrears of about \$800m the committee of leading creditor banks, chaired by Citibank, is still seeking a meeting soon with the country's new finance minister, Sr Garrido Lecca, a former banker who replaced Sr Jose Bonavides Munoz last week.

A deadline of January 14 is looming when current temporary arrangements extending immediate debt maturities runs out. One school of thought on the advisory committee is that these arrangements should only be prolonged for a further month to keep pressure on Peru to settle its outstanding arrears.

An International Monetary Fund mission is scheduled to visit Peru later this month, but bankers hold out little hope of a permanent deal to sort out the country's foreign debt problems until after April 14.

Neves outlines plans for government

By Ann Charters in Sao Paulo

WITH JUST over a week to run before Brazil's indirect presidential election the front running candidate, Sr Tancredino Neves, is touring the country revealing more of his plans for a new government.

He has expressed both populist sentiments of guaranteeing access to land with credit and technical assistance for impoverished millions in Brazil's north-east and spoke in favour of a stronger role for unions and workers in the new government.

Yet he has balanced these sentiments with harsh criticism of strikes for strikes sake only. He ruled out a moratorium on the payment of Brazil's debt as a step not worthy of the country's role as the world's sixth largest power with important multilateral economic and political responsibilities.

Speaking before 600 union leaders this weekend, Sr Neves announced the start of a "new era" for the country that would be based on a democratic constitution that assured the rights and liberties of the people.

In his speech, Sr Neves referred to military governments in place since the revolution in 1964 as having brought the country 20 years of "suffering, mutilation, confiscation and repression."

As part of his campaign for the presidency Sr Neves has promised to call a constitutional assembly at the latest in 1988.

Responding to a lengthy document from the unions outlining their members' interests, the presidential candidate agreed that workers should have a larger participation in the "destiny of the country."

He indicated his willingness to see workers included in the management of social welfare programmes, national housing programmes and public sector companies.

The economic committee composed of Conservatives and Liberals that Sr Neves set up to draft comprehensive options for an economic plan for his government is expected to submit its proposals before the indirect election on January 15.

## WORLD TRADE NEWS

### W. German company pays \$4.1m fine to U.S. Treasury

By NANCY DUNNE IN WASHINGTON

THE U.S. Treasury added \$4.1m to its coffers last week after FAG Kugelfischer of West Germany, along with its Ontario and Connecticut companies, agreed to pay one of the largest civil penalties ever collected by the U.S. Customs Service.

The settlement was reached after an investigation by Customs concluded that FAG had given false invoices and descriptions of hearings and components imported from 1973-78, a practice which cost the U.S. Government more than \$1m in import duties. Under U.S. law, fraud penalties can total four times the estimated lost revenue.

Customs officials, suspecting that millions more dollars are being lost through commercial import frauds, have cast a wider net for violators. With Operation Tripwire, launched in 1983, they have been producing bigger and bigger catches.

Under the crackdown, Thyssen Steel was found to have imported cold rolled steel from Thyssen Stahlunion of West Germany during 1978-81, and had falsely described its shipment as a cheaper grade of steel to evade both Customs duties and a dumping investigation by the Department of Commerce. Thyssen agreed to a settlement of \$3.25m.

The same operation led to the seizure of more than \$100,000 of counterfeit Jordache jeans from Hong Kong and \$40m worth of coffee, most of which had falsified country of origin documents.

Under Operation Tripwire, the Customs service in fiscal 1984 seized more than \$62m worth of fraudulent and quota-violating goods, including counterfeit watches, toys, computers and electronic products. Almost half of the seized merchandise, worth about \$30m, was counterfeit textiles and apparel.

The Customs effort was initiated as imports, boosted by the strong dollar, made dramatic new inroads in U.S. markets. Mr John Walker, Assistant Secretary of the Treasury, which oversees the Customs Service, said the Reagan Administration concluded that if the U.S. were to fend off protectionist demands by domestic industries, special efforts would have to be made to keep free trade honest.

Almost 300 agents—including import specialists, auditors and laboratory personnel—were detailed for the job. Their activities are co-ordinated by a national fraud centre in the basement of the Customs building.

### Bids called for Thai plant

By BOONSONG KTHANA IN BANGKOK

THAILAND'S National Petrochemical Corporation has invited international companies to submit prequalification bids preparatory to participation in the tender for construction of its \$350m (€304m) olefins plant in the East-coast province of Rayong. Boonsong Kthana reports from Bangkok.

The olefins plant, the upstream part of Thailand's \$830m planned petrochemical complex, will use indigenous natural gas fractions produced by the state-run Petroleum Authority of Thailand's gas separation plant as feedstock for the annual production of 315,000 tons of ethylene and 105,000 tons of propylene.

### McDonnell committed to making MD-87

By Michael Dornne, Aerospace Correspondent

McDONNELL DOUGLAS, the U.S. airliner manufacturer, has now formally committed itself to the manufacture of the new 109-130-seat version of the MD-80 series of twin-engine short-to-medium range airliners, the MD-87.

The decision was fore-shadowed just before Christmas, when two European airlines, Finnair (8) and Austrian (4), together placed firm orders for 12 of the new aircraft, with deliveries due in late 1987, at a cost of about \$240m (£208m).

Mr Jim Wortham, president of the Douglas Aircraft Company division of McDonnell Douglas, said that airlines world-wide had expressed interest in the MD-87, and more orders were expected in the next few months.

Competing with the MD-80 are the British Aerospace 146 four-engine regional jet airliner, the new Fokker F-100 twin-engine jet airliner, and the Boeing 737 twin-engine jet.

They are all battling for a market expected to amount to more than 1,000 aircraft in the 100-130 seat category by the end of this century, worth some \$15bn to \$20bn (£13bn to £17bn).

Pacific has converted an option on a second Boeing 747-300 extended upper-deck Jumbo jet into a firm order, and has taken an option on a third such aircraft. Its first 747-300 is due for delivery in June, and the second in March 1989.

The third, if converted to a firm contract, will be delivered in March 1991. The aircraft are worth about \$100m each.

Alitalia has ordered six of the new Franco-Italian (Aérospatiale) Airbus A320 150-seat turbo-prop airliners, with an option on four more, for use by a new airline to be formed by merging Aermediterranea with ATI to create a domestic Italian operator. First deliveries are due in 1989. The price of the deal has not been disclosed.

### Christian Tyler and Nancy Dunne look at prospects for Foreign Sales Corporations U.S. export tax law 'conforms with Gatt'

TWELVE YEARS after Canada and the EEC complained that American Domestic International Sales Corporations (Disics) were an illegal form of export subsidy, new U.S. legislation has brought American export tax law into claimed conformity with the General Agreement on Tariffs and Trade (Gatt).

The law, which came into effect last week, seeks to replace the controversial Disics with new bodies called Foreign Sales Corporations (FSCs). The crucial difference is that, whereas Disics are paper entities inside the U.S., the FSCs must be real companies operating offshore.

Up to 8,000 of these new bodies may be created in the coming months as U.S. exporters seek to qualify for the new tax allowances on their overseas sales revenue.

FSCs can be set up in U.S. territories like the Virgin Islands, American Samoa, Guam or the Northern Mariana, but not in Puerto Rico. They may also find homes in 23 countries identified by the Treasury Department; the favoured EEC locations seem to be the Netherlands, Belgium and Ireland, but also eligible are Australia, New Zealand and parts of the Middle East and Africa.

Britain, Switzerland and Italy are prominent by their absence from the approved list because they either cannot or will not pass on to the U.S. Internal Revenue Service enough information about companies registered within their borders.

Traditional financial secrecy may be sufficient explanation of Switzerland's exclusion. As for the UK, negotiations are still going on, according to the

Americans, but officials in London say Parliament would have to legislate to provide any more information than that already available under the bilateral double taxation agreement.

Nor is Britain particularly keen to play host to FSCs. According to officials they would add little or nothing to the British economy. Furthermore, Britain is still questioning whether FSCs conform to the spirit or indeed the letter of the Gatt rules.

If the EEC decided to return to the attack, Britain would probably support that. However, it seems unlikely that the issue will be pressed; it is recognised that the U.S. has made the effort to obey the Gatt's ruling against it and American goodwill is vital if the Gatt is to rebuild its

authority as regulator of the world trading system.

Under the new U.S. law Disics are not abolished but exporters who continue to use them will have to pay a yearly interest charge on deferred taxes accumulating from the beginning of this month.

The real tax advantages will, however, go to the new offshore bodies. If an FSC buys from independent suppliers in its role as trade middleman, 32 per cent of its income will be exempt from U.S. corporation tax. If it is supplied by a "related entry" then 16 per cent of the income from the export deal would be tax exempt.

The legislation also lays down how FSCs are to be constituted and the minimum amount of work they must do to qualify for the allowance.

The U.S. Revenue will not allow credit for foreign taxes paid by a FSC, so a sales office located within a jurisdiction which imposes little or no income taxes is said to be a practical necessity. U.S. tax authorities are also requiring FSCs to maintain specific business records in both domestic and overseas offices, and they are forbidden to have more than 25 shareholders or to issue preferred stock.

FSCs give exporters slightly more than did Disics. Treasury officials estimate that in fiscal 1984, Disics brought in a revenue loss of \$1.1bn (£95m). FSCs would have cost \$1.3bn more.

The IRS has given exporters three months to sign up for FSC benefits, so it will not be until April that estimates will be available of business participation in the new scheme.

### Kuwait, China set for pact on fertiliser production

By RICHARD JOHNS

KUWAIT is expected to form a joint venture with China for the large-scale manufacture of ammonia fertiliser using gas from an off-shore field in the South China Sea under an agreement signed last week in Peking.

Mr Rong Yiren, head of the China International Trust and Investment Corporation, and Sheikh Ali Khalifa al Sabah, Kuwaiti Minister of Finance and Oil, decided on the formation of a joint development company, according to the New China News Agency.

No details were released but the main priority is understood to be fertiliser production based on the massive gas field being developed by Chinese National Offshore Oil Corporation and Atlantic Richfield in a licence area where Santa Fe, a wholly

owned subsidiary of the Kuwait Petroleum Corporation has a minority 30 per cent interest.

Sheikh Ali Khalifa was accompanied on his visit to China by a senior executive of Santa Fe whose C. F. Braun chemical engineering division is in the forefront of fertiliser manufacturing technology. It is believed that as many as six plants with an optimum capacity of 1,500 tonnes of ammonia a day is envisaged.

They would require nearly 300m cubic feet per day of gas compared with the likely output from a single platform estimated earlier this year by Arco of 500m cfd.

Chinese officials indicated then that they were thinking of utilising the gas for large petrochemical projects to be based on Hainan Island.

### Chinese show interest in Land Rover venture

By LISA WOOD

THE Chinese Government is investigating the possibility of setting up a joint production plant with Land Rover, part of BL, the motor vehicles company.

Land Rover said yesterday that the Chinese had made it clear that they regarded its models as the leading 4-wheel-drive vehicles in the world.

Last year the company played a significant part in British motor manufacturers' demonstrations to the Chinese whose potential market for vehicles such as Land Rovers is huge.

One of Land Rover's major international competitors, American Motors, has already set up a joint venture in China. The venture, called Beijing Jeeps, started manufacturing Jeeps about a year ago, based on a 1950s design. It is under-

stood that production targets are currently some 20,000 Jeeps a year for the Chinese market.

Land Rover said that while it had given the Chinese full details of its vehicles production, no detailed talks had been held on production targets or the size of investment. Neither had it been discussed whether a plant would assemble kits or manufacture Land Rovers.

Land Rover, which improved its sales performance in 1984 and introduced a new model, the One Ten, has 20-odd plants around the world, primarily in Africa. The domestically manufactured content varies from plant to plant. Some 70 per cent of UK production—about 40,000 vehicles a year—is exported. The company also sees strong potential for direct exports of vehicles to China.

### Pactel to help update Yunnan 'phone system

PACIFIC TELESIS International has won a contract to assist the Chinese province of Yunnan update its telephone system, Louise Keyhoe reports from San Francisco. This is Pactel's first overseas contract since the Californian telephone company was given court approval to move into the international market place last month.

Pactel did not disclose the value of the contract, but a spokesman said the company hoped that it would lead to the sale of a substantial quantity of telephone equipment.

The province's telephone system is antiquated and inadequate. According to Pactel, the Chinese want to double its size and convert it to a modern digital system.

### World Economic Indicators

	INDUSTRIAL PRODUCTION (1975 = 100)				% change over previous year
	Nov. '84	Oct. '84	Sept. '84	Nov. '83	
U.S.*	165.0	164.2	165.0	155.1	+4.2
Japan	128.1	128.2	127.1	109.5	+10.3
U.K.†	102.3	101.5	100.0	102.3	0
W. Germany	116.2	116.3	116.9	115.4	+0.4
Italy	124.5	124.1	119.7	118.0	+7.2
Netherlands	118.7	117.4	113.5	109.3	+6.8

\* 1947 = 100, † 1980 = 100.

Source (except U.S., U.K., Japan): Eurostat

### Alcatel gains ground in U.S. market

Alcatel-Thomson, the French telecommunications grouping formed out of merged CIT Alcatel and Thomson interests, has gained further ground in the U.S. market by clinching a digital switching order with United Telephone System, one of the leading U.S. telecommunications companies, David Marsh reports from Paris.

UTS, ranked as the leading U.S. group in its field outside the Paris Bell companies, will buy Alcatel's modified E.10 public exchange, the E.10-5 system, for installation in its Midwest group at Glasco, Kansas this year.

Alcatel, which has suffered a generally disappointing year on export markets after its failure to be considered for public switching orders in the UK, is making a big effort to market its systems in the U.S. to profit from American telecommunications deregulation.

Thomson S.A.'s subsidiary Thomson Grand Public has signed a contract to supply 230,000 colour television sets to China this year.

### SHIPPING REPORT

#### Further proof of operators in trouble

By Andrew Fisher, Shipping Correspondent

FOR the world shipping community, 1985 began in the same overcast mood in which 1984 left off—depressed by further evidence of companies in trouble and with freight rates still weak.

Completing a trio of major operators in difficulties, Gaz-ocean of France disclosed that it had asked four owners to retrospectively cancel costly charters and instead take shareholdings in the gas shipping concern.

Recent weeks have seen the failure of both Sweden's Saleninvest, in the refrigerated cargo sector, and Irish Shipping in the bulk carrier area.

With increasing over-tonnaging in container ships as major orders are delivered and ambitious round-the-world plans get under way, this sector too looks due for upsets.

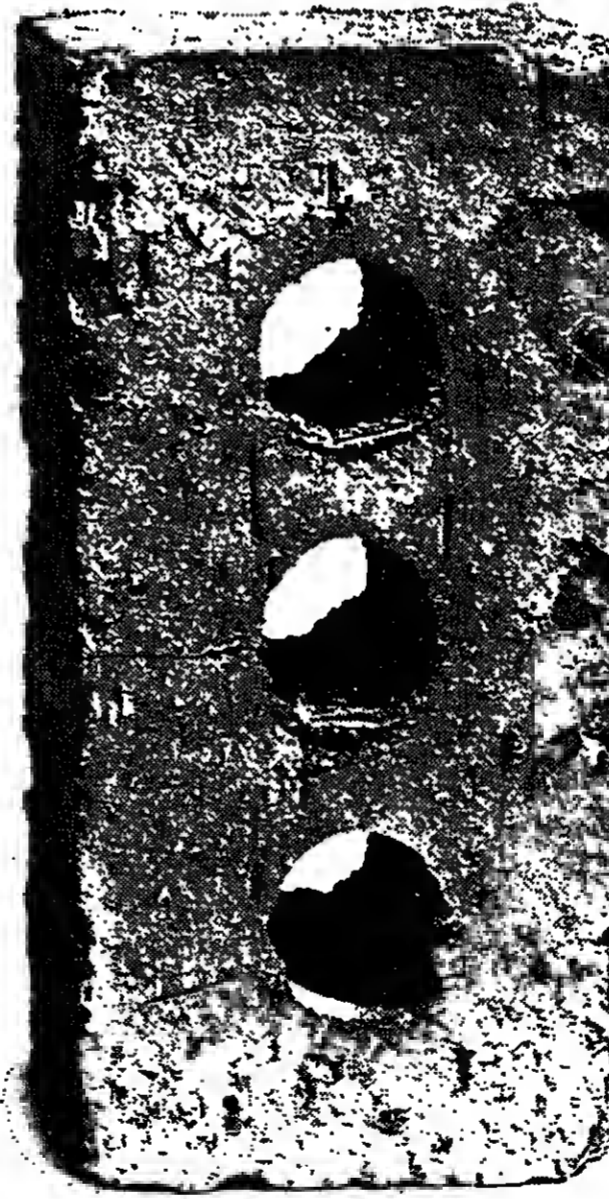
All in all, said London shipbroker Denholm Coates, it was "a pretty murky start to 1985."

Dry cargo rates from the U.S. to Japan and South Africa dipped and there was no uplift from further Russian and Chinese grain ship chartering.

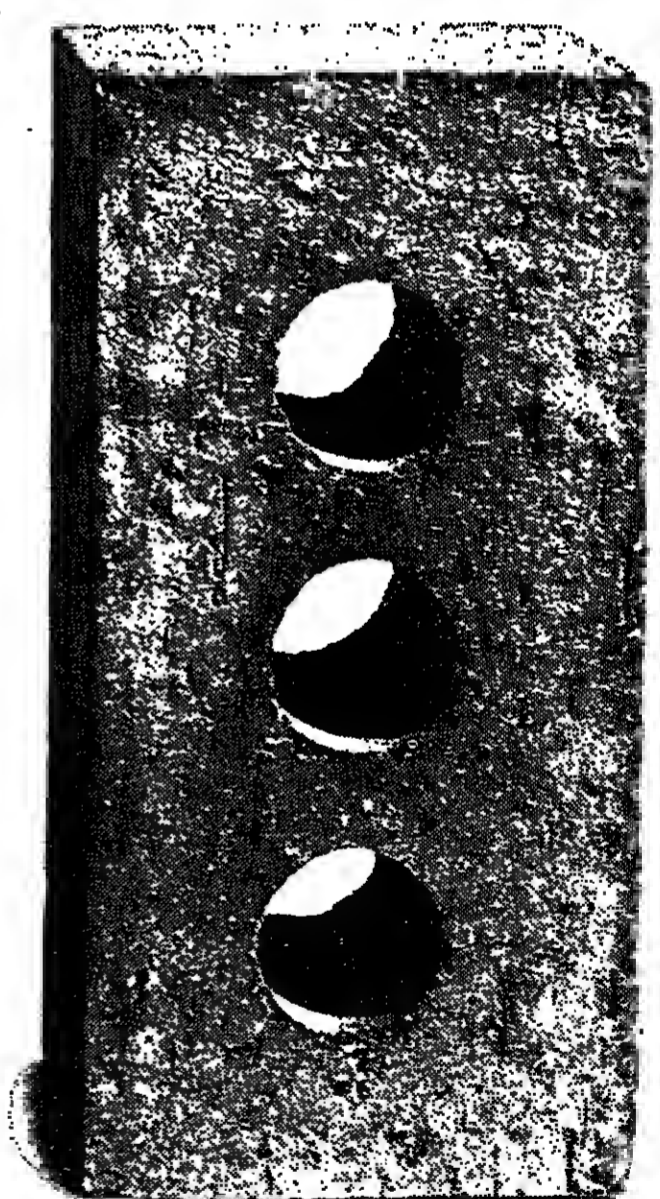
This year could, however, be less fraught than 1984, which ended with most rates no higher than a year ago and an oversupply in tankers of 18 per cent and bulk carriers of 3 per cent.

The surplus was down on 1983. And, if world economies show more growth and dollar interest rates fall further, "1985 may still prove, if not a golden year for shipping, at any rate a slightly less catastrophic one than 1984," said Edgar Forrester.

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## BUSINESS LAW

## Flexible approach to trade issues

BY A. H. HERMANN, LEGAL CORRESPONDENT

IT WOULD be much too pretentious even to attempt a survey of the European legal developments in the past year. I will only try to point to certain areas of change.

One of these is that the fascination exercised by Community law on UK business lawyers waned with greater familiarity and with the realisation that there is a great need for "harmonisation" beyond the scope of the EEC, for example, of the extraterritoriality contradictions between Europe and the U.S. and, no less dramatic level, between the German and the English approach to certain commercial and banking transactions.

Within the EEC law area itself one could note a pronounced shift of attention from competition matters to trade issues appearing in various forms according to the kind of protection against imports or subsidy for exports.

The basis for a greater litigiousness in the anti-dumping field was provided towards the end of 1983 by the European Court's judgment in Case 191/83 establishing that industrial enterprises have a right to demand the Commission's protection against dumping and can turn to the European Court for help if the Commission refuses to act.

Soon afterwards, in February 1984, the Court strengthened the Commission's hand, making it clear that it could proceed with countervailing duties without a re-examination of the case when the offending foreign company withdrew its undertakings.

In contrast with the rather rigid stance adopted in competition matters, the European Court adopted a flexible approach to trade issues. Thus, in the *Campana/Oil* case, it conceded to Ireland that essential national industries may be helped by assuring them a privileged high-priced market.

In the *Mabanaft* case concerning import duty on coal, it conceded to Germany that there are exceptions to the rule that the European Coal and Steel Community is a customs union.

Unfortunately, the Court did not show a sufficient grasp of international business to follow Madame Simone Rozes's Opinion in the *Asurmenne Mines* case that it is sometimes necessary to grant special discounts for the opening of a new market.

There were a number of interesting decisions on pricing regulations, and some more cases are pending. Of greatest topical interest in view of the Department of Health and Social Security project of limiting medicines which can be prescribed is the UK National Health Service's *Duphar* decision where the court said that this could be done only if no discrimination of producing countries was involved, and if there was adequate possibility for revising the list with advancing knowledge.

The court also approved the Belgian price control of medicines in Case 301/82. The two *Leclerc* cases, one concerning retail price maintenance of books and the other French regulation of petrol prices are still pending but close to a decision. The *Opinions of the Advocates General* concerned favoured the approval of Retail Price Maintenance on books but branded the price regulation of petrol as a discriminatory measure likely to restrict French imports of petrol from other EEC countries.

The Competition Department of the EEC Commission continued to suffer from its initial mistake of using smallmesh nets and casting them too widely. They caught more fish than they could haul out, and instead of letting go they tried various remedies, all equally doomed to failure. The "letting go" could be achieved by rehabilitation of the provisional validity of notified agreements repudiated at the Commission's prompting by the court in the early 1970s.

The Commission is now trying to deal with the thousands of notified and potentially invalid agreements by issuing "comfort letters" saying that no immediate action was intended. Optimistic managements may welcome such a piece of paper from Brussels as a pledge of eternal peace but their legal advisers should feel very uncomfortable in view of the court's clear declaration that such letters have no legal effect.

The Commission made considerable progress on the other way which it hoped would lead it out of the quagmire: it obtained from the council approval for block exemption regulations concerning patent licensing and exclusive dealing agreements.

To obtain the member states' agreement it had to yield to criti-

cism which over the years has been repeatedly voiced in this column. However, these amendments do not remove the fundamental objection that such exemptions are unnecessary because most of the agreements concerned should not be considered anticompetitive anyhow.

Why is it a greater restriction of competition if the owner of a patent monopoly transfers it to someone else? And why is it more anticompetitive to appoint a sole dealer than to take over a local distributor or establish a local subsidiary? But even if the Commission is somehow unable to follow the U.S. Supreme Court in its view that distribution agreements are not a matter of ideology but of market analysis - and that some may indeed be pro-competitive - one must be grateful that its officials are now sufficiently mellowed to try to meet at least the detailed criticism of their projects.

The house they are building will still have a structural fault, but its plumbing will be at least improved.

In the field of competition enforcement, the Commission must be congratulated at having brought to an end, by an agreed compromise, its challenge to IBM. Its lawyers have now learned that they operate in a world of politics, but apply this newly acquired knowledge sometimes with excess.

Such was the case of the Commission's *Internilla* decision which approved Belgian state aid for a qualitative upgrading of paper mills by means of grants and loans, but condemned the same when done by means of equity participation by the public hand.

The decision, a result of a political deal, was full of contradictions and assertions unsupported by evidence. The court threw it out. It would be ridiculous that the great apparatus could not produce anything better for its political masters if it was not rather sad that the decision reflected a disdain of market analysis and a willingness of the political masters to sign anything submitted to them by the staff and agreed by the kabbalah of their chief of cabinets.

The weakness of political lead and control became also evident from the Court of Auditors' criticism of the Commission's transfer of its responsibilities for distribution of foreign aid to the European Investment Bank.

Compared with issues resulting

from trade wars or which may lead to a substantial reduction in the price of motor cars - endeavoured by the Commission by its *Ford* decision and recent regulatory attempts - hills of lading, hills of exchange, cheques and commodity options usually attract only the attention of experts.

However, a number of German, Italian and European Court decisions indicate that there may be a more urgent need for harmonisation of laws in this field than in many to which the European Commission gives high priority, while English courts adhere fairly strictly to the principle that bills, cheques, bank guarantees and letters of credit are abstract documents of title.

German courts attach greater weight to the principle of good faith and allow it to override the abstract nature of the document. There is an even greater difference in the treatment of commodity options and other differential debts, which in Germany are put in the same category as gambling, so that the resulting debts are enforceable only exceptionally under conditions laid down in the statute.

As the case of *Rayner v Bank für Gemeinnützige Wirtschaft*, now pending in the High Court, shows, even very experienced London commodity dealers can get trapped when applying notions of English law to deals made with or for German clients.

In contrast with these rather technical problems of business law, the transatlantic conflict over the responsibility for the demise of *Laker Airways* was and remains very much in the public eye. While the House of Lords has shown great reticence, the U.S. courts are becoming more and more extravagant in their application of U.S. antitrust laws to events taking place abroad.

The conflict over the extraterritorial application of national laws to international business is clearly getting more intense and more threatening to friendly trade relations the longer it lasts, and it is no consolation to say "I told you so". Perhaps the bitterness of the conflict and its evident damage to trade will persuade the governments of the need to take these matters out of the reach of courts and to provide for new means for settlement of such disputes.

## UK NEWS

## Key nuclear questions in final phase of inquiry

FINANCIAL TIMES REPORTER

IMPORTANT QUESTIONS affecting the future and organisation of the UK nuclear industry could be answered during the final phase of the Sizewell B power station inquiry which starts tomorrow. The plans to build a pressurised water reactor (PWR) on the east coast of England have produced Britain's longest public inquiry.

The next two months of closing submissions will be the last chance for inquiry participants to confirm or alter the conclusions reached by Sir Frank Lauchfield QC, the inspector, after two years of detailed evidence. Sir Frank will then be left to consider his recommendations to the Secretary of State for Energy.

His main task is to say whether or not he believes the first PWR power station will be a sound investment and acceptably safe. Implicit in a recommendation that consent should be granted would be Sir Frank's satisfaction that the Central Electricity Generating Board (CEGB) has the ability to build Sizewell B within 7½ years and within the £1.2bn budget.

After a wide-ranging inquiry taking in all aspects of the nuclear fuel cycle, however, his report will cover a series of important issues and will help to shape Britain's nuclear power policy into the 21st century.

It will also influence important decisions affecting the organisation of the nuclear industry and its relationships with safety watchdogs. A number of important issues have been identified during the inquiry by Sir Frank, the first of which took the CEGB by surprise.

The inspector set out to discover: ● If the British-designed advanced gas-cooled reactor (AGR) would be safer and more economic than the PWR.

● If the CEGB's project management structure is sound.

● If present "safe" radiation dose limits should be reduced.

● If the present lengthy methods of obtaining safety clearance for reactors needs improvement.

● If the CEGB's proposals to minimise the environmental impact of Sizewell B go far enough.

Sir Frank decided that the CEGB had not paid enough attention to comparing the PWR with the AGR and he invited the South of Scotland Electricity Board to give evidence.

Mr Donald Miller claimed that proven British expertise in AGR construction would enable future reactors of this type to be built quickly and at no budget. He said he was afraid of the PWR would "kill off" the AGR.

The CEGB disagreed and, in a move to reassure its Scottish equivalent, announced at the inquiry that it would finance a new study aimed at improving the AGR design and the maintenance of a team of AGR

experts. The Scottish board later informed the hearing that it did not believe the measures went far enough.

The CEGB has argued that although the economics of the two reactors are similar, it makes good sense to establish the PWR as a further option for the future. With the help of Mr Henry Brooke QC, counsel to the inquiry, Sir Frank has subjected the CEGB's project management proposals to close scrutiny.

He invited Sir Alistair Frame, vice-chairman and managing director of Rio Tinto-Zinc, to give an independent opinion of the board's plans. Sir Alistair made wide-ranging criticisms, some of which were met by the CEGB.

The main area in which the board declines to budge is Sir Alistair's recommended recruitment from overseas of a project overlord experienced in PWR construction.

Public concern over a possible link between low levels of radiation and the onset of disease led to the inquiry examining the subject in great depth. Sir Frank, however, was told by Sir Edward Pochin, consultant to the National Radiological Protection Board, that he considered present international limits were adequate.

Sir Frank is expected to take at least six months in drawing up his report, and a government decision is unlikely before early 1986.

## British Lada contract agreed

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

SATRA CORPORATION, an importer of Russian-built Lada cars to Britain, and Avtoexport, the Soviet trading organisation, have resolved serious differences of opinion which threatened their relationship and have signed another long-term contract.

The news will be given formally to the 185 Lada dealers in Britain at a meeting on Wednesday. It will end months of speculation about who would take over the Lada import franchise which has regularly accounted for about 1 per cent of total new car sales in the UK.

Avtoexport controls the Lada import businesses in Belgium, Norway and Sweden and in October 1982 took over the import company in West Germany from Satra, a U.S.

group. There have been suggestions that Avtoexport would either acquire the British operations or that they would be moved to another independent organisation.

Mr Agop Chalekian, an executive vice-president of Satra and managing director of Lada Cars GB, the UK holding company which owns the right to import all Soviet cars to Britain, revealed at the weekend, however, that his company had signed another long-term contract late last year.

The UK is the second most important market after France in Western Europe for Soviet car sales. Registrations in Britain reached a peak of 22,770 in 1979 which gave Lada a market share of 1.3 per cent. Sales plummeted the following

year, however, as a quarter of the dealers deserted the franchise after Soviet troops moved to support the regime in Afghanistan in December 1979.

Since then the dealer network and sales have been systematically rebuilt, but 1984 was a poor year for Lada. Mr David Hunt, managing director of Satra Motors, the UK operating company, said that registrations in 1984 were about 15,000 compared with a target of 19,000.

He blamed the miners' strike and its impact on the economies of those areas in which Lada usually achieves most sales. This suggests that Satra Motors will suffer further losses for 1984. In 1983 it declared a net loss of £72,349 on sales of £9.26m.

## Call for additional North Sea tax relief

By Ian Hargreaves

THE GOVERNMENT should grant additional tax relief to North Sea oil producers to encourage them to extract additional oil from existing fields, according to a study published today.

Professor Alexander Kemp and Mr David Rose of Aberdeen University, two of the leading British experts in UK oil taxation, argue that although the subject is complex, ways can be found of devising schemes which will not be too costly to government and which will provide enough incentive to oil producers to invest in enhanced oil recovery projects.

In his last budget, Mr Nigel Lawson, Chancellor of the Exchequer, said he would consider tax incentives for enhanced oil recovery schemes. He is expected to disclose his conclusions in the next budget. Indications are that the Treasury might permit an additional capital allowance against petroleum revenue tax, although a number of other options exist.

The Aberdeen study considers a wide range of possible tax incentives and tests them against the economics of a variety of enhanced oil recovery methods. They include drilling satellite wells, flooding oil reservoirs with chemicals to make thick oil flow more easily and increasing pressure in oil reservoirs by lifting them with water.

The Aberdeen simulations show that the effect of any type of fiscal relief is highly complex because of the variability in field types and the existing complex tax system. Wide-ranging tax levels and types are levied from different fields.

The report, however, identifies two types of tax incentive which, it argues, would not be so generous as to risk encouraging companies to "gold plate" their engineering or so ungenerous as to be ineffective in stimulating investment. These are: ● Abolition of oil royalties on the oil produced by enhanced oil recovery investments.

● Extra expenditure allowances for enhanced oil recovery projects. The disadvantage of this method is that it will stimulate only the more capital-intensive types of scheme.

Fiscal aspects of incremental investments in the UK Continental Shelf. Department of Political Economy, University of Aberdeen, Edward Wright Building, Dumbarton Street, Aberdeen AB9 2TJ; £2.

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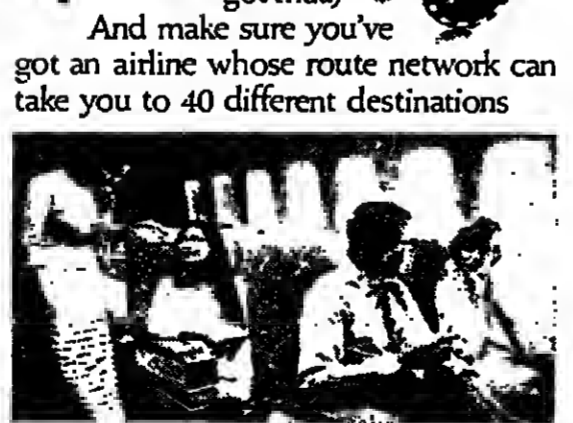
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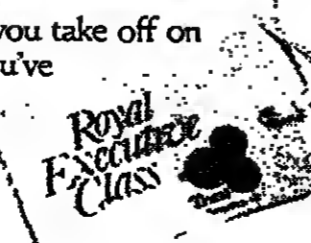
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## UK NEWS

# Surge expected in numbers ending strike

BY PHILIP BASSETT, LABOUR CORRESPONDENT

SENIOR OFFICIALS of the National Coal Board (NCB) and leading working miners expect a new surge in the number of miners returning to work to begin today. The NCB feels that more than half of Britain's miners are likely to be working within a few weeks.

Both the NCB and the working miners expect heavy picketing today, however, as striking miners try to discourage a return. They feel this might spread the return to work later in the week and for the rest of the month.

Mr Ian MacGregor, NCB chairman, broke his long public silence over the coal dispute yesterday, forecasting that the return to work from today would be "something like" the two to three weeks last November and early last month, when in all some 17,000 miners returned to work.

Speaking on TV-am, he maintained that the hundreds returning each day marked a "very important step" and said that these numbers coming back were "quite satisfactory." The period from today would see "a continuation of that gradual movement back."

The NCB claims that about 70,000 miners are back at work, and Mr MacGregor said that after taking into account the normal amount of natural wastage over a period the length of the present 10-month-old strike, a figure of about 85,000 represented about half the number of miners.

Reaching the targets predicted both by Mr MacGregor and Mr Michael Eaton, the NCB's official spokesman, on the same programme, would mean more than half the miners back working in a few weeks time.

Mr MacGregor said that when that happened, the National Union of Mineworkers would have to recognise that the majority of its members were back and they should then "return to normal working conditions. I'm sure that will happen in due course."

In the coalfields, area officials of the NCB were echoing Mr MacGregor's points. In Scotland, the NCB expects a substantial number to return today as the pits open for the first time after Christmas.

# Working miners may force union to hold elections

BY PHILIP BASSETT, LABOUR CORRESPONDENT

WORKING MINERS' leaders are considering taking legal action if necessary to ensure that elections are held for members of the National Union of Mineworkers (NUM) national executive committee.

Nominations for elections to 24 seats on the NUM executive are due to be called for next month, and centre and right-wingers in the union - including many connected with the organised working miners groups - plan to challenge for the seats.

Control of the NUM executive could be a crucial factor in the outcome of the strikes. At present led by the left, with the right in disorganised retreat, the executive could become the focal point for a revolt against the leadership of Mr Arthur Scargill, NUM president, if moderate miners are successful during

the elections in altering the political complexion of the executive.

Elections for the comparable body in the Nottinghamshire area of the NUM, the area council, saw pro-strike left-wingers all but completely replaced by centre and right-wingers opposed to the strikes.

Nottinghamshire, however, is so far the only NUM area to have held such elections, for in many areas elections and branch meetings have been suspended for the duration of the strikes.

Working miners' leaders are worried that similar moves may be set in train to defer the national elections. Proposals will be put this week to lawyers who have been acting for the National Working Miners' Committee that court orders should be sought to ensure that

these elections are held, if there are signs of moves to prevent them.

Any elections for posts on the NUM's national executive would probably be conducted by postal ballot. The working miners might apply for this under provisions of the Government's 1984 Trade Union Act which gives power to the courts to order a postal ballot if strict criteria on voting have not been met. This would apply if it was felt that moves might be made to disrupt the elections.

Miners' leaders thought to be under particular threat in the elections due to be concluded by early summer include Mr Sid Vincent from Lancashire, Mr Ray Chadburn from Nottinghamshire and Mr Gordon Butler from North Derbyshire.

# Both sides 'in state of victory'

BY OUR LABOUR CORRESPONDENT

BOTH SIDES in the coal dispute are in a "state of victory" which neither wishes to end, although both may wish that the dispute was over, according to Dr Edward de Bono, an academic and leading thinker.

In an unusual analysis of the coal dispute, Dr de Bono, lecturer in medicine at Cambridge University and author of the philosophical work "Lateral Thinking," suggests that the Government is winning by not giving way on its policy and economic intentions.

At the same time, Mr Arthur Scargill, NUM president, and the NUM were winning because the strike was continuing and a substantial number of miners were backing their leaders.

In line with his own tendency to think around issues, Dr de Bono, in an article published today called "Letter to Thinkers," presents two real and previously unstated proposals which might help to resolve the lengthy dispute.

First, instead of a drift back to work in the face of often violent opposition from striking miners, Dr de Bono suggests that miners register for work by post or telephone, but stay at home.

Then, when more than 50 per cent of the miners at any one pit had registered for work, miners would be expected physically to re-

turn. On return, they would then receive their back wages. Dr de Bono describes this as a "sort of implicit national ballot."

Secondly, he suggests that the National Coal Board could have the right to close pits on economic grounds, providing some conditions were met, including "the immediate provision of other means of keeping the community alive. So pits could be shut down, but not communities."

Similarly, the NUM could have the right to keep any pit open - provided that it met its conditions, such as providing say 25 per cent of the additional subsidy required.

# Benn rules out challenge to Kinnock

BY JOHN HUNT

MR TONY BENN, the left-wing MP for Chesterfield, yesterday crushed suggestions that he will be challenging Mr Neil Kinnock for the leadership of the Labour Party in the autumn.

He gave a blunt "no" without elaboration when the question was put to him in a BBC television interview.

Some left-wingers have wanted to mount a challenge to Mr Kinnock to show their dissatisfaction with the leader's stance

on the miners' strike. They believe that he has been hedging his bets and has not been strong enough in support of Mr Arthur Scargill.

Mr Benn would have been their favourite candidate, but he is known to have been reluctant to accept the role. A more likely possibility is that the hard left will put up a candidate against Mr Roy Hattersley, the deputy leader, who is under constant criticism from the left for his moderate views.

Before leaving for a visit to Nicaragua yesterday, Mr Kinnock made it clear that a period of silence from the hard left factions within the party would be welcome during the coming year. He feels that constant carping against leading figures in the Shadow Cabinet will cause further damage to Labour's electoral prospects.

Mr Kinnock said 1985 would be a crucial year for Labour, but he rejected suggestions that it would be a disastrous one.

# Unions risk TUC suspension over ballots

BY OUR LABOUR STAFF

SENIOR Trades Union Congress (TUC) leaders are forecasting that the electricians' union EETPU, and possibly the AUEW (engineering workers) are likely to be suspended from TUC membership in a few weeks' time for taking Government money to fund internal union postal ballots.

Leaders of the Electrical, Electronic, Telecommunication and Plumbing Union (EETPU) will tomorrow meet Mr Norman Willis, TUC general secretary, over the union's decision to apply for Government money, contrary to TUC policy.

A similar meeting with leaders of the Amalgamated Union of Engineering Workers will also take place this week, though the date has not yet been fully finalised.

Although many union leaders felt that the TUC - to some extent already starting to rethink its blanket opposition to the Government's labour laws - might try to circumvent

controversy over the EETPU's decision, and the AUEW's move to help its members on the issue, senior TUC figures were warning yesterday that suspension from membership was now likely.

One senior figure said: "There is no doubt in my mind that if the EETPU decide to take the money, then the general council will suspend them." Expulsion of the two unions would create the biggest division in the TUC since the deep splits over registration under the Conservatives' ill-fated 1971 Industrial Relations Act.

The two unions, which together comprise about 13 per cent of the TUC's total affiliated membership, and contribute proportionately to its income, form the largest right-wing grouping on the TUC, and their expulsion would markedly shift the TUC's political complexion to the left.

Under TUC rules, unions are suspended by the annual TUC Con-

gress. The Congress would also decide whether to re-admit the union, or expel it fully.

Industrially, expulsion could remove the unions from the protection of the TUC's Bridlington principles, which govern inter-union relations. This could prompt a series of inter-union disputes if other unions try to poach the membership of those expelled.

Leaders of the EETPU in particular have always warned in previous controversies with the TUC, such as the bitter Isle of Grain power station dispute in 1980, that lifting of the TUC's inter-union rules would be likely to result in the EETPU aggressively challenging other unions for members previously protected by Bridlington.

Nevertheless, senior TUC figures are warning that unless there is some change of heart by the two unions, suspension seems inevitable. They were forecasting yesterday that the TUC's key employment

committee meeting on January 16 to review labour law policy would recommend their suspension.

This would then be ratified by the TUC's "inner cabinet," its finance and general purposes committee, on January 21, and approved by the full TUC general council two days later. Its decision can be overturned only by the full TUC congress.

TUC officials are adept, though, at finding scope for compromise, even on such sensitive issues, and they are likely to try to find ways of avoiding expulsion if at all possible. Compromise by the unions themselves seems immediately unlikely, Mr Eric Hammond, EETPU general secretary, said yesterday: "I can't possibly see any way we will change our position."

He said he would listen carefully tomorrow to Mr Willis and Mr Bill Keys, chairman of the employment committee, since they had sought the meeting, but he saw no prospect of the EETPU changing its mind.

# Spending demands rejected

BY OUR PARLIAMENTARY STAFF

MR LEON BRITTON, the Home Secretary, yesterday firmly rejected the demands which have been voiced by many Tory MPs for a package of capital spending on public works and regional infrastructure in order to reduce unemployment.

Mr Britton indicated that in the March budget the Government was determined to use any available money to increase income tax thresholds and thus help the lower paid.

"I unhesitatingly say that the tax route is the better one," he said in an interview on independent television.

He said that, although a boost in capital spending might look physical and immediate, it was really "shortsightedness of the first order."

It would merely give a short-term boost to employment that would be dissipated in the second and third year with interest rates going up and inflation rising.

On the other hand, the effect of rising tax thresholds was to increase incentives greatly. It would give the equivalent of a pay increase at the lower end of the income range without actually putting up pay. This would be most beneficial for bringing jobs back, he said.

Mr Britton also made clear that the Government was sticking to its proposal, announced by Mr Patrick Jenkin, Environment Secretary, of limiting the amount which local authorities could use from their housing accounts for capital expenditure.

Mr Jenkin has to bring an order before the House of Commons to curtail local authority capital spending, and many Tory backbench MPs remain bitterly opposed to it.

A memorandum from the director general of the National Economic Development Council to be presented to senior Government ministers, business and union leaders on Wednesday will state that "it is hard to find solid grounds for expecting much improvement" in the current 13-14 per cent unemployment rate before the end of the decade.

In a suggested timetable of debates on the new jobs exercise, the NEDC director general proposes a big review next month by the Department of Employment of pay and its effect on jobs.

# Energy switch to coal

BY MAURICE SAMUELSON

NORTHERN IRELAND's largest power station at Kilroot, near Belfast, is to be converted from oil to solid fuel, at a cost of about £70m, despite the continuation of the coal strike.

The conversion is being made because of the rising losses of the Northern Ireland Electricity Service (NIES), which in 1985-86 could require subsidies of £95m.

The NIES, strongly supported by the National Coal Board (NCB), has

been pressing for Kilroot's conversion for some time. Cabinet ministers have now accepted the economic case for doing so, but they are anxious that the announcement be carefully phrased because of the coal strike.

A decision on the final wording may be made this week before the formal announcement by Mr Douglas Hurd, the Northern Ireland Secretary.

NEW ISSUES January 4, 1985



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## MANAGEMENT

AROUND THE end of January, if there are no last minute hitches, Formica Corporation becomes an independent company. The management of one of the world's leading manufacturers of plastic surfaces familiar on kitchen countertops will lead a buy-out from Formica's parent, American Cyanamid, the pharmaceuticals and chemicals group. The price is \$200m (£168m). Exactly how much equity the management will own has yet to be revealed.

The move is something of a gamble. Once pre-eminent in its field Formica has lost ground to aggressive competitors in recent years and the big question must be whether it can survive and prosper as an independent company in increasingly tough market conditions.

American Cyanamid announced in October that it had agreed to sell its Formica subsidiary, which, until 1977, it had jointly owned with De La Rue, the UK banknote and security printing group. Specific details have not been revealed, but it is understood that the deal is to be financed by borrowings against Formica's \$210m (£176m) of assets and is backed by Shearson Lehman/American Express, the U.S. banking group.

Heading the company will be Gordon Sterling, a 49-year-old American who is currently president of the Formica division and has been with American Cyanamid for 21 years. He predicts that Formica will "operate in much the same way," as before, but stresses that it will be more aggressive in marketing new products and will expand into new markets.

Some Wall Street analysts feel that the move may provide a needed shot in the arm for Formica, which is based in New Jersey just down the road from American Cyanamid and which has a worldwide spread with 12 plants in 11 countries. While it still holds around a third of the \$1.5bn (£1.25bn) worldwide market for decorative laminate materials, Formica faces tough competition in the U.S. and in Europe.

In the U.S., which in 1984 accounted for nearly 60 per cent of Formica's \$370m (£311m) turnover, it has been outstripped by Wilson Art, a subsidiary of Dart and Krafco, the food and consumer products group, has more than doubled its market share in the last two years. Now holding around 35 per cent of the market, it has left Formica with just under a third.

The two companies compete head on with each other, and Wilson Art has grabbed market leadership from Formica by being more aggressive. According to Ed Duncan, marketing

### Formica buy-out

## Tough times ahead as an independent

Andrew Arends on the outlook for the plastic laminates group as it is about to break away from its parent company

manager of Wilson Art, "We provide a faster and better service to the customer."

In Europe, including the UK, companies like Perspex, the Swedish specialty chemicals group, have eroded its market share. Perspex's success has been based on its development of higher value-added laminate products, such as specialised flooring panels, and a wide variety of marine products.

Unlike Formica, which has traditionally sold sheets of the raw plastic surface to fabricators to turn into kitchen countertops, and worktables, Perspex is heavily involved in the design and development of the final products. Moreover, it is set to maintain its position having perfected the technology to produce laminates in continuous rolls which are both cheaper and easier to work with than in sheet form.

As one American analyst points out, roughly 80 per cent of Formica's U.S. turnover comes from traditional laminate sales for new construction and refurbishment. In Europe the pattern is roughly similar. Within these markets DIY accounts for 30 per cent of sales (the proportion is roughly the same for Formica's competitors)—double the level of ten years ago. However, materials such as natural wood finishes are making a comeback at Formica's expense.

He adds that although Formica's profits are expected to reach a peak of \$35m (£29m) on sales of \$370m (£311m) in 1984, "this has occurred on the back of the extraordinary boom in U.S. housing," which he says "is unlikely to be repeated."

The question now is whether an independent Formica management can reverse this trend, by exploiting new markets for the product, particularly in the Far East, and by extending its product range into areas less subject to erratic fluctuations in new housebuilding.

Shearson claims that the new group "will be more aggressive in launching new products," and that the company can shake out the doldrums that have hit its performance in recent years. Joseph Salvani, who follows the company for Goldman Sachs, the New York investment bank, agrees: "The new management will be leaner, and given they

have a financial stake in the company, more sensitive to its profitability," he argues.

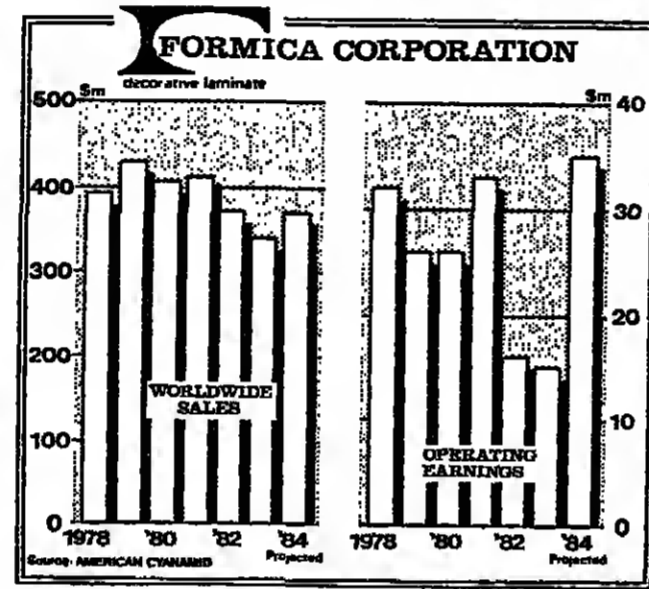
Sterling agrees, and points to a number of new products on which the company is basing future growth.

Included in these are flame retardant surfaces that are beginning to be used on panelling in airports and public buildings. He also cites an "anti-static" material, to be used in computer rooms where static electricity has to be avoided.

Another new Formica product is "ColorCore," a higher quality tougher wearing plastic surface, which is becoming increasingly popular with architects, for use on wall panels.



Gordon Sterling



ColorCore, one Formica executive points out, like the other new products, "provides greater profit margins than traditional Formica products."

Currently, these products account for around 15 per cent of sales, and Formica hopes to boost this percentage substantially. In terms of geographical breakdown, the U.S. and Europe account for 50 per cent of sales. Over the next five years these markets are expected to grow slowly, and demand for Formica products could be sluggish.

John Boanas, a vice-president at Formica and part of the new management team, concurs with this forecast. He insists, however, that "Formica's new markets are expanding." The Far East and Australia, which currently account for 10 per cent of group sales offer "exciting prospects," he says. "Formica sales in Japan, Taiwan, Hong Kong and Singapore should grow by 10-15 per cent a year in the near future."

As the leading manufacturer of decorative laminate surfaces for over 25 years Formica's name has virtually become the generic term used to describe the product.

But the boom in sales that occurred during the 1950s and 1960s slowed dramatically by the mid 1970s. The industry was hit hard by both a retelling of the growth of housing and by the impact of rising oil prices on its feedstock costs.

In 1977 American Cyanamid bought De La Rue's 60 per cent stake in Formica for \$9.6m (£7.9m). The British group, which had become a cash drain, American Cyanamid's gain was less clear though one Wall Street analyst says it "was partly motivated by the fact that Formica was the largest customer for American Cyanamid's melamine resin products."

Though Formica bounced back to profitability, some analysts felt the American Cyanamid was not allowing it to develop new products aggressively enough.

American Cyanamid claims that the reason it is selling Formica is because it does "not fit into the group's long term strategy"—which is to specialise in pharmaceuticals and bio-technology. But it is also the case that, if as has been predicted, U.S. growth slumps in 1985, Formica's profits could slip back to 1982 and 1983 levels. Then Formica earned \$16m (£13.3m) and \$15m (£12.5m) on sales of \$372m (£310m) and \$340m (£284m) respectively.

According to Salvani at Goldman Sachs: "This is the perfect time for American Cyanamid to sell off Formica."

### Management education

## A remote form of learning

BY WALTER ELLIS

DISTANCE LEARNING: Is it simply a question and answer process in the Groves of Academe or is it truly a new art-form in which traditional methods are spooled on to the age of the cassette?

The answer depends, as always, on who is being asked. The Strathclyde Business School, one of Europe's largest management learning centres, claims that its Open Executive Programme (OEP), in which new management skills are acquired through home study, is a "major new initiative."

This may be so. But listen to the views of two of its chief rivals. Henley, the Management College: "A re-packaging of lecture notes." Cranfield School of Management: "Oh yes, the fancy new word for a correspondence course."

Cynics might suspect that Strathclyde's competitors are being just a little bit bitchy. The fact is that, while they admire the Scottish college's achievements overall and acknowledge the commercially sound nature of the latest deal, they are not convinced that the OEP does not fall between two stools.

Conventional, residential courses, centring on lectures and tutorials, are based as much on personal contacts between academics and students as on written material. The most advanced "distance" courses employ video and audio techniques that open up new dimensions of learning, but do not neglect the human dimension. There are regular meetings with tutors, and even short residential courses.

What Strathclyde is attempting, basically, is a remote learning procedure, based on the printed word, in which personal contacts are reduced to a minimum. It aims to provide an "off-the-shelf" university-level training without constraints of time or examination.

Students of the OEP will typically be middle-ranking company staff wishing to improve their career prospects through enhanced management skills. Some will study on their own initiative; others will be sponsored by their employers. They will select from a range of "subject modules"—each a reprocessed course taken from the existing Master of Business

Administration programme—and work on them at their own pace in their own time.

Modules currently available comprise: cost-accounting and finance; quantitative methods; manufacturing management; human resources and economics of the business environment. Others are being prepared. No previous academic qualifications are required but there is an option to take university examinations in the subjects pursued.

The language in which business education is discussed among the cognoscenti can on occasions be almost impenetrable—a sign, it might be argued, of academic insecurity. There is much talk of "continuum," "combos," "acrambles," "consciousness-raising" and the like. "We're really trucking" was one, slightly archaic pronouncement.

### Expertise

But beyond the jargon, there is also a deal of hard thinking and proven expertise. British management may not be widely recognised as the best in the world. It is improving fast, though, and that is at least partly attributable to the growth of business schools over the past 25 years.

The schools themselves are highly competitive over distance learning. This seems appropriate and explains much of the "dramatic with faint praise" that often accompanies their observations on one another. Strathclyde: "In five years, Henley will build up an open executive programme of its own." Henley: "Ha! The only real distance learning in this country is run from Henley and the Open University."

Strathclyde: "The OEP is a vast opportunity for management." Cranfield: "... not particularly sophisticated programme."

It may not sound it from the above, but there is mutual praise, too. Each recognises that, beneath the stuff, the others are offering professional business education and trying out new methods. The rivalry is friendly, between academics who, as hired labour themselves, often move around.

Accepting this, the question

remains: is the Strathclyde OEP truly new or is it a re-read? Critics' centres on the fact that there is an emphasis on the printed word. For centuries, this criticism would have been absurd. Civilisation has been based on the printed word for more than 400 years. Television, video recorders and micro-computers, often linked, have changed that. Henley bases its distance learning courses on super-stick videos, often fronted by nationally-known figures, like television presenter Cliff Michelmore. Cranfield is working with the Open University on a hi-tech video package and has developed a computer-based "Micro-Tutor" in association with Longman.

Strathclyde is, of course, very much aware of the potential of electronics and is unlikely to be left behind in this particular race. Indeed, it is already running. Yet its OEP is undeniably ahead of many of the much of the competition. The various "modules" are even advertised as "off-the-shelf," "already prepared and proven." The new ground that is being broken is any, is in the area of availability and easy access. Skillfully written courses, logically presented, are being put up as lures to busy managers who feel a need to learn more but do not have the time to become "deeply immersed."

As Professor Neil Hood, associate dean of Strathclyde, puts it: "The Open Executive Programme is a highly flexible arrangement which allows candidates to undertake management training without being absent from work and to study at their own pace."

Students will have access to tutors and libraries and will be able to attend weekend courses if they wish. Moreover, the programme has the support of the somewhat choosy Open Tech Unit of the Manpower Services Commission. No one denies that Strathclyde will offer a professional service to those undertaking the OEP. What is at issue is the wisdom of launching a paper-based programme at a time when the trend is towards the computer and the screen. There may well be a lucrative niche left for such an approach; Strathclyde has to hope that experience and tradition still count for something.

## TECHNOLOGY

### COMPUTERS AUTOMATE PRINT MATCHING

## How to finger a criminal

BY ROY GARNER IN TOKYO

SHERLOCK HOLMES would have been fascinated by, and the criminal community has much to fear from, "the 13 minutiae." These represent the threshold quantity of fingerprint "information" required for an accurate identity check by a computerised fingerprint analysis system developed by NEC Corporation of Japan.

Whereas in the past, fingerprints were only useful for "search" purposes if a considerable portion of the print, ideally from several fingers, was available, with the NEC system even a fingerprint scrap is often usable, and comparisons with fingerprints on file can be completed at the rate of 650 prints per second.

The number 13 has already proved truly unlucky for a wide

In a 10 week period following the introduction of the NEC system, San Francisco authorities claimed fingerprint analysis had solved 220 felonies and 140 burglaries.

range of offenders in San Francisco, Alaska state and Japan where the new system has been installed. Take the case of the San Francisco Police Department, the first overseas customer.

In a 10 week period following the introduction of the system, the San Francisco authorities claimed fingerprint analysis had solved 220 felonies and 140 burglaries, and led to the capture of 10 murderers, rapists and 18 robbers. This total "catch" normally would have corresponded to more than four years of detection work.

In Japan also, the system got off to a spectacular start with the successful identification of the culprit in a murder case which had gone unsolved for 15 years, and which was due for compulsory suspension just one month later under the statute of limitations.

Computerised fingerprint ID systems have also been developed by both European and American companies, but NEC Corp. claims to have a world lead in terms of the speed and accuracy of its fingerprint

analysis and the quantity of fingerprint data which can be accessed. In the case of the National Police Agency of Japan, which initiated the collaborative research work with NEC Corp. in 1970, a database of 1.4m prints is said to be available for cross-reference and this total is scheduled to rise to 6m by around 1988.

The study of fingerprints, which goes back over 100 years, centres on a general classification of common shapes (which carry names such as "whorls," "loops" and "scars") and identification of the points at which the lines or ridges of a print divide or terminate. Recent attempts at computer analysis of these latter features have concentrated on the direction and relative position of each "minutia." A major problem however is that latent fingerprints (ones collected from the scene of a crime) often tend to be distorted, a difficulty which usually can be avoided when prints are carefully impressed upon the "ten-print" file cards used for reference purposes. The NEC system claims fully to overcome the distortion problem by using an additional item of measurement, namely the number of ridges present between adjoining minutiae, a factor which remains constant even where print distortion is present.

Each latent print sample is examined with reference to an X-Y axis positioned across the theoretical centre of the total print (where only a section of print is available preliminary work is needed to establish its approximate position relevant to the whole.)

In each quadrant thus formed, the minutiae closest to the X-Y axis are chosen for comparative analysis. Using a scanner, the position and direction of each minutia is recorded together with the ridge count between it and its four closest neighbouring minutiae. If at least 13 minutiae are present then the identification process is possible.

Once the latent print data has been acquired it is fed into a fingerprint matching processor which has access to a data base containing comparable data relating to "ten-print" files. In each "search" operation, the comparison of the 2 sets of data makes allowance for varying possible "rotations" of a latent print, and produces a score in

terms of the number of minutiae which can be paired, the likelihood of pair possibilities and the number of minutiae which cannot be paired.

The LSI chip used in the processor can compare 40 search minutiae with 100 file minutiae (or vice versa) in 1.3 milliseconds.

Kazuo Kiji, general manager of NEC Corp's EDP National Government Systems Division, who has supervised the entire fingerprint project, says that the development of the relative algorithm used in this comparison process was the most difficult element of the program, and the factor most crucial to its success. The end result of the search procedure is a list of approximately 15 possible candidates, ranked in order of probability. It is subsequently a simple job for a manual check to secure positive identification of a single candidate.

Kiji says that the success of NEC's system can be measured in terms of a reduced total of candidates for secondary manual study and a high percentage of search "hits" recorded, and the project's long-term aims are defined as "high cost-performance and accuracy." Technologies used in the NEC system include an image enhancement process to improve the contrast of ridge features prior to final reading, and character and pattern recognition technologies used for the "correction" of distorted or wrongly rotated images.

NEC hopes to use skills developed in these technologies in other fields and these could include palm-print reading and security applications such as systems for the management of personnel entry into restricted areas, and customs control.

The NEC system comes in a building block configuration with small, intermediate or large units available depending upon user data-base requirements. In the case of the San Francisco system, 300,000 file prints can be accessed and the total system cost was \$2.6m.

NEC Corp. says it is currently submitting budget proposals to over 100 prospective clients around the world, and expresses confidence at its potential competitiveness with other systems. Industry sources say however that the race is now on amongst producers to introduce a system which can instantly categorise

latent prints in terms of their basic shape classification, an advance which could drastically reduce the time required for overall data processing.

Logic is one of three major companies involved in the manufacture of computer fingerprinting systems. The first to come out with an operational system was the Californian Printrak company which is now part of the De La Rue group. Logica in the UK installed its Focus computer fingerprint system for New Scotland Yard in August and has recently won an order from another European police force.

The New Scotland Yard

The race is now on amongst producers to introduce a system which can instantly categorise latent prints in terms of their basic shape classification which could drastically reduce processing time.

machine presently handles more than 440 searches a day which is more than three times the number of manual searches previously carried out by police staff. New Scotland Yard has about 45,000 criminal records in the Greater London area stored on the computer with the aim of increasing this to 80,000. There are also plans for a national system over the next two to three years.

All fingerprint recognition systems are based on finding mathematical correlation between minutiae after digitising the fingerprint image. In the UK, a match of 15 minutiae are needed before prints are said to correlate which is one of the strictest requirements in the world.

Mr Trevor Armstrong, manager of the Focus system, said that Logica had concentrated on the accuracy of matching rather than speed but conceded that the NEC system was the fastest on the market.

Gangers in Japan, who traditionally have cut off their little fingers as a sign of loyalty and courage, may soon need to start reviewing the future of their other nine digits.

### COMPUTERISED SCORE TYPESETTING

## Concerto for computer, laser and fast hands

BY ALAN CANE



Michael Mack-smith and Karen Callow working on the Musicwriter and music setting system

IT TAKES a real musician to play the Musicwriter, a modified typewriter used to type musical notes on manuscript paper ready for the printer to turn it into sheet music.

It was West Central Printing, part of the Premier Metropolitan group, which introduced the Musicwriter into the UK in the late 1960s as a cost-effective replacement for hand engraving. Now the company is pioneering again with what it claims is the first fully computerised music setting system to output directly to laser photostetter. And it takes no less of a musician to play that.

According to West Central managing director David Foden, the machine is the result of an intensive search for an effective computerised music setting system; in West Germany he found a computer system devised by Professor Kurt Maas able to handle musical notation. The output, however, fed to a simple pen plotter, gave an

image which was of insufficient quality for printing.

The answer was laser printing. West Central worked with Monotype to interface a laser printer through Kurt Maas screen and keyboard—the result was a fast system producing high quality camera ready copy.

Much of the advantage of the new machine—which at £100,000 each is only for the larger music printers—lies in the very powerful software developed by Professor Maas.

Once a score is stored in the computer's memory, for example, it is simple to request it to print out various instrumental parts or to transpose between one key and another, at the press of a button, for example, the "Air on a G String" can be printed out, transposed to B flat.

Mr Foden reckons it now costs his customers 30 per cent less to print a page of music, whether classical or popular. Classical music, for example, is often the prerogative of the

smaller, specialist printers because of the high costs involved. Now Mr Foden reckons the can cut 30 per cent off the customary price of £30 or so a page in setting costs.

Ha has sole rights to the Kurt Maas system for two years in the UK and is anxious to test export potential in the U.S. But even Professor Maas' system is comparatively primitive. The music is written into the computer a bar at a time as a series of computer instructions.

Mr Foden thinks the time is not too far off when it will be possible to write directly onto a picture of the score on the video screen.

He is also looking forward to Professor Maas' latest inspiration—a machine which will print out sheet music directly from acoustic input—the music equivalent of the typewriter you can talk to. And IBM has already done that!

West Central is on 01-636 5572.

EDITED BY ALAN CANE

## Design and Construct



Norwest Holst

### Computing

## P C Model extensions

THE LAUNCH of the IBM PC and its derivatives sparked a whole new industry dedicated to creating slot-in circuit boards to enhance the potential of these machines. Norwest Corporation is one such company which also produced add-on boards for the Compaq, Columbia, Texas Instruments Professional and other IBM-compatible systems.

The latest boards are the Permyr PC/Memory Plus Clock which supports up to 576,000 bytes of random access memory; its clock/calendar feature automatically stamps the user's file eliminating the need for manual input of this data.

It also features a software lock to prevent unauthorised access and the capacity to print up to 30 pages of data or text without interruption in data processing activities.

### Components

## Storing digits

AMERICAN TELEPHONE and Telegraph's Bell Laboratories have developed a computer memory chip which can store 1m binary digits of information and which could be in full production in 1986. Thomas Thomson, president of AT&T Technology Systems Group said he expected the new chip to be used in digital telephone exchanges, computers and special purpose products.

The new chip squeezes four times the amount of memory into the same space as the first version of the AT&T 256K DRAM but needs only half the operating power to give one-third more access speed.

THE ARTS

Architecture

Colin Amery

A time to raise the standard



It was during the annual conference of the RIBA in July last year that York Minister burned—a sign that it is time for architectural reform in 1985?

The most important thing to happen to architecture in 1984 was that it moved to the centre of the public realm as a subject for discussion. The Prince of Wales did architects a service when he spoke at the Hampton Court dinner to mark the 150th anniversary of the Royal Institute of British Architects, although his remarks were highly critical of the profession. The Prince's decision to be seen to be on the side of the public was an important one for architecture.

It has been some time for a member of the royal family to hold any views at all about art and in the Prince of Wales the nation may have a champion and a patron at the highest level. He was right when he said he could see no reason why new buildings should not be both visually beautiful and socially useful.

This year starts off with a sense of anticipation. There is a lot in the pipeline. We wait for the unveiling of the proposals for the new BBC Portland Place radio headquarters to be designed by Norman Foster—the winner of this year's Financial Times Architecture Award.

Norman Foster is bound to produce an exciting and controversial new centre. There will be battles with conservationists over the demolition of the Langham Hotel and the 18th century houses on Cavendish Square. Is it possible to produce high-tech contextualism? In France, Norman Foster is to design the new cultural centre in Nîmes and his Hongkong and Shanghai Bank in Hong Kong looks set to be the world's first billion-dollar building.

What will happen in the incredible story of the National Gallery extension? Now that the Minister has turned down the "carbuncle" design by Ahrends, Burton and Kjaer, I hope that the new chairman, the trustees, Mr Jacob Rothschild, will abandon the plan to build commercial offices on the site to pay for the art-rooms for the pictures. It should be possible for the National Gallery to raise the money by public subscription to erect a new wing that utilises the whole site.

There is not much chance that the Secretary of State for the Environment will allow the Miles van der Rhee tower to be built in the City by Mr Palmbo. The long public inquiry in the early summer was an extraordinary event. Very few of the old arguments for the scheme were seen to be valid anymore—and the City of London and the Greater London Council continued their well-founded opposition to the scheme. What has been fascinating has been the expense and trouble that the developer has been prepared to go to in order to try and win support.

If Mr Patrick Jenkin overrules his inspector's expected rejection of the plan the whole question of the value of the democratic process of public inquiry will have to be examined by Parliament.

The Secretary of State has not really had time to show any particular concern for aesthetic and architectural matters—he is, after all busy abolishing the GLC. Perhaps when that is done he could take a long hard look at the visual state of the nation.

What will the Thatcher era leave behind as monuments to its vision of Britain? There is a danger that it will be a half-built Channel Tunnel/Bridge that will land in the South East of England, littered with small high-tech industrial estates. Further North the inner cores of formerly prosperous industrial cities will be in serious decline with the odd theme park or Museum of Industrial Archaeology on the outskirts. Much of the country could look like London's Dockland—a mixture of speculative dollar houses and tin sheds for industry.

An exhibition held in 1984 showed the pitiable state of development in Dockland. What a missed opportunity! The figure sparkling, each witicism turned with great aplomb, and the finale ended at a tremendous speed without ever relinquishing control.

Perhaps someone reads reviews after all. Almost unknown in Britain, Michele Campanella made his London debut a year ago in the Elizabeth Hall to a pitifully small audience that included some doubtful critics. They were enormously enthusiastic about what they heard, and when on Saturday Campanella returned, this time to the Wigmore Hall, it was to a creditably full house. His recital demonstrated that last year's display in Scarlatti and Liszt was no fluke: Mr Campanella is a pianist of a very high calibre indeed.

If the crowning glory of his programme was the fearsome account of Mussorgsky's Pictures which made up the second half, it did not overshadow the dapper trio of classical sonatas that preceded it. Clementi's G minor sonata Op 7 no 3 was played for its worth, exploiting the full range of modern keyboard sonority without any suggestion of over-inflation; Mozart's sonata in C minor K.457 was picked out in sharp detail, never milked for its implicit tragedy. The third of Beethoven's Op 81 set in E flat, suits Mr Campanella's jaunty extroversion perfectly; it emerged with every rhythmic

scale of all the new development is too small and bears little relationship to the grandeur of the riverside landscape. A chance to make Docklands the most spectacularly landscaped river park in Europe has been completely missed. Hills, lakes and forests could have provided the setting for new homes and businesses while providing East London with the lung it so badly needs.

Milton Keynes has shown how large scale landscaping worthy of Capability Brown is still possible. Dockland, like Merseyside, is a victim of the lack of vision in Thatcher's Britain. The eighties, with a large unutilised labour force, is the perfect opportunity to make the country more beautiful—to date it has been missed.

And what of the future of the capital? No planners seem fully cognizant or even to be studying the possible drastic declination of the numbers of white-collar office workers. There is no doubt the new technology will render many pen-pushing and paper tasks redundant.

Will office workers come to over-sized office blocks simply to be sociable—the idea of large concentrations of workers is no longer necessary.

For the remaining 15 years of the 20th century a programme of selective demolition is clearly called for. The miserable buildings of the 1930s and 1940s that blight so much of Britain, particularly in the field of public housing, should be scrapped. A national programme of high quality homes for the people and cities cleared of the excesses of the professions concerned with the environment. There is no reason why the skyline of the future should not be beautiful, the parks arcadian again, and the work-places agreeable, small-scale and civilised.

Do the architects have the vision to make the second half of the 1980s a time for the transformation of Britain into a land of beauty? This is not a mission for wets but a serious hard-headed policy that would take guts to achieve—it is time for a raising of standards.

Rare excitements close a worthy year

A solid succession of concerts of worthy and pleasurable but not exceptional quality; the usual sprinkling of disasters; and a handful of rare excitements that one wouldn't have missed for the world—that is the regular pattern, to which 1984 was no exception, which goes to make up almost every musical year.

As it happened, the most notable of the best and worst, were largely confined to the last half of 1984. During the first six months of the year perhaps the most memorable event was Pierre Boulez's return in February after his long absence to conduct the BBC Symphony Orchestra. Twenty years before, almost to the day, Boulez had taken the rostrum for the first time in front of the BBCSO; and his return, although billed as the start of the LOCB's continuing "Music of Eight Decades" series, inevitably had something of an air of anniversary celebration.

There were no announcements, no speeches (although Boulez consented to introduce the evening with a pre-concert talk). But the Festival Hall was nearly full for the occasion, and Susan Bradshaw's tribute to our programme doubtless summed up the sentiments of many present: "Just as Pierre Boulez, the composer, influenced the styles and compositional techniques, as well as the musical thinking, of a whole generation of performers during the 1940s and 1950s, so the work of Boulez the conductor and programme-planner was to have an equally far-reaching effect in moulding the habits and attitudes of a new generation of performers and concert-goers during the 1960s and 1970s."

Boulez began his programme, just as he once used to in his trailblazing days two decades ago, with Webern's Op 8 and Op 10. The manner has not softened, but it has relaxed with the years: less glacial exactitude, more vivid dramatic excitement—more concern especially with the poet's separation of sounds, and with the allures between them. They were stirring performances, bright, brilliant, exquisitely shaped—has his once unbearably hectic reading of Webern's Das Augenlicht, I had to wonder, after his own early Le soleil des tour and the Improvisation sur Mollarm III,

he gave an exhilarating and savage account of Bartok's most austere and savage orchestral score, The Miraculous Mandarin, firing the BBC Orchestra to an electric display of anniversary eloquence.

Jeffrey Tate's conducting had already been a notable feature of two English Chamber Orchestra seasons, but his concert with the LSO in July marked his debut in a full-length programme with a major symphony orchestra. The evening was all Beethoven; and his account of the seventh symphony in particular confirmed all our expectations that he might prove to be a Beethovenian of quite exceptional stature.

The most insistent resonance, which coloured every performance, was of Klemperer—the very serious clarity of his treatment invited the parallel, and his open, direct and unfussy, but meticulously detailed working of every page of the music confirmed his aptness. His tempo movements, without any more evident purpose in view than to achieve the next as quickly as possible, is deeply disturbing: a vision of Mahler principally as purveyor of tawdry, cheapjack effect, an "orchestrator" merely of cynical, vulgar effusions.

Sinopoli's treatment—a veneer of "great music-making" without any of its actual substance—is in fact pure kitsch. His coy, self-conscious delivery of the andante second movement especially had its exact counterpart in the ghastly drawing and bronzes (the very acme of the new GLC populist aesthetic) of Tom Merrifield exhibited in the Festival Hall's foyer two floors below.

Sinopoli zipped through the Urtlich with immediate baste, allowing Brigitte Fassbender to sing at all to unfold her "Roschen." The explanation was plain: far too long had passed since the last orchestral explosion, and he was uncomfortable with the gap. Turning the first part of the finale into a piece with a clear Hammerflügel music, and the second part into a gigantic fluorescent neon sign, is I suppose, an artistic achievement of a kind. But the question is: will we have to put up with it for long? For his finale, after his own early Le soleil des tour and the Improvisation sur Mollarm III, also conducted by Sinopoli, with

the same orchestra, some 16 months previously.

Sinopoli, at least for the time being, is the Philharmonia's new principal conductor. His way with almost any orchestral work (and not merely a Mahler symphony) is to latch on to as many "effective" bits as possible, inflate them out of all sense of context, and play them for all they are worth, hoping that not too much of importance happens in between. There is nothing anywhere in his direction that is more superlatively evocative of the real task of the conductor: the powerful control of phrase, rhythm, texture and direction. For Sinopoli a triple-forcissimo or triple-planissimo—he is very partial to exaggerate dynamics—means everyone playing very

loudly or very quietly; he evidently does not conceive of music in contrapuntal or connective terms, but rather as blocks of primary colour linked by insubstantial bridges.

The result of such lurching from technicolour screen to technicolour screen, without any more evident purpose in view than to achieve the next as quickly as possible, is deeply disturbing: a vision of Mahler principally as purveyor of tawdry, cheapjack effect, an "orchestrator" merely of cynical, vulgar effusions.

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they would today be the elder statesmen of their field—for they first appeared in public one year before the Amneus, in 1946. A few months before their 30th anniversary, however, the Borodin's two violinists defected ("emigrated" is the polite word) to Holland, and thence to the U.S.

That should, on the face of it, have marked the end of one of our age's great string quartets. But it was their, and our, astonishing good fortune to discover in Mikhail Kopelman and Andrei Abramankov two much younger violinists who were not merely technically and musically the equals of those they replaced, but also perfectly attuned to the ensemble's style. The sold-out Wigmore Hall which greeted their re-formed London "debut," also in July, could justly acclaim the Borodin still as they did with standing ovation as one of the world's great string quartets—possibly indeed the greatest, fresher and more exact in their interpretation, more thrilling in their technical perfection, than they ever were.

It was one of those memorable recitals, of rare and magical quality, during which no player seemed able to put a bow or a finger down. The range of sonority most immediately striking, is immense: from the lushest chamber-orchestral swell (Kopelman and Abramankov playing together make a sound almost as large and rich as an entire string section) to a wonderful, pure non-vibrato blend. The Borodin are one of the few great quartets still playing and at the height of their powers who are old-fashioned enough not to submerge their music-making in a sea of vibrato, but use it selectively to precise expressive ends. Every page of their recital was an object lesson not much in bow to use vibrato, as how not to use it when its use is plainly wrong.

Their finale of the second quartet of their namesake Alexander Borodin was a marvel of subtle tonal interplay: a delicate web of vibrato and non-vibrato, deftly spun, then vanishing like smoke—a mirror play of line and colour, the purest exhilaration. In the darkness of Shostakovich's eighth quartet the Borodin found a myriad of sombre reflections, cool depths, sudden sparks in drying mud. As the first Largo ended, their concentration, and our silence, was so intense that several seconds went by before anyone dared applaud. Words cannot touch why it was so exceptional, enough to say that the Borodin return to London in February.

Dominic Gill concludes our review of music in 1984

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The Nutcracker/Festival Hall

Clement Crisp

The current marathon of Nutcracker undertaken by the Festival Ballet, at least brought an opportunity to see some of the artists recruited to the company since Peter Schaufuss became artistic director. The staging now looks careworn and slightly out of performance out of focus, standing in urgent need of cosmetic surgery to brace its sagging chops, but at the week's end I was impressed by the sweetness brought to their participation in the melee of the festivities by Katherine Healy and Patrick Armand as Louise and Clara (Droschmeyer's nephew and the eponymous hero).

Nancy Ballet Théâtre Français, gave Karl no less charm, and in the brief act preceding the snowflakes waltz was a most poetic cavalier. His interpretation was everywhere marked by technical fervour; splendid the way the dance bursts forth, brave and clear, in the first act and in the final pas de deux.

Raffaele Paginini from the Rome Ballet also made a good impression as Karl, at an earlier performance, his temperamental brightness well matched with Janette Mulligan's dulcet Louise. Among supporting roles, Matz Skoog was a clear-cut, buoyant Fritz. There was a piece of clear-cut buoyancy about the orchestral playing: the score sounded by turns gabbled and mechanically dry, and Chalkovsky deserves better, even with the routine of twice-a-year performance.

Concerts at Christie's

The main auction room at Christie's becomes the setting for three evening concerts every year by the Royal College of Music chamber players. On January 14, February 11, and March 11, at 6.30, there will be performances of works by Bach and Mozart. Cost of admission is

£5, which includes a glass of wine. The venture is part of Christie's increased interest in arts sponsorship. The proceeds of the concert will go to the Royal College of Music appeal, and Christie's is planning future concerts to help small musical ensembles.

Arts Guide

Musical Monday, Opera and Ballet Tuesday, Theatre Wednesday, Exhibitions Thursday. A selective guide to all the Arts appears each Friday.

Music

LONDON

BBC Symphony Orchestra conducted by Peter Eotvos. Kaributos Stokhausen, sound projection, Bernhard Wambach, piano. Stockholm, Barbican Hall (Tue), (0338801). Stockhausen series continues throughout the week.

PARIS

Teresa Berganza, mezzo-soprano, J. A. Peraino, piano, Puccini, Schubert, Schumann (Mon), TMO/Chatelet (033444).

Orchestra Colonne conducted by Claude Bardou with Elliott Tancet, soloist. French Chamber Music Society, Théâtre de l'Odéon (Tue), (0338801).

Orchestra Nationale de France with Tamas Vagyay as conductor and piano soloist, Gaudin Janowitz, soprano, Mozart (Tue), Théâtre des Champs Elysées (033477).

Paco Restani and Orff's Carmina Burana (Mon and Tue), (0341044). Rome Oratorio del Gonfalone (vocal soloists 1/2) by Giulio Gogginno conducting and playing the violas in two Bach concertos (Thur), (033932).

VIENNA

Orchestra Cheltenham, Berlin, with Helen Donath, soprano, and Hermann Frey, baritone, Lachner, Donizetti, Schubert and Nicolai, Musikverein (Mon), (033410).

Vienna Symphony Orchestra conducted by Christoph Eschenbach with Julius Franz, piano, Brahms and Stravinsky, Musikverein (Wed and Thur), (033410).

Andreas Weissen, piano, Chopin, Beethoven, Musikverein (Wed).

Kochi Quartet, Dvorak, Mozart and Tchaikovsky, Musikverein Brahms Saal (Thur).

NETHERLANDS

Amsterdam, Concertgebouw, Güther and Silber Peckel, two pianos, Mozart, Rachmaninov, Stravinsky (Mon), Amsterdam Philharmonic conducted by Thomas Sandberg with Christine Ortiz, piano, Western, Grieg, Schumann (Tue), Recital Hall (Tue), Sarah Walker, mezzo-soprano, and Roger Vignoles, piano, Wolf, Schumann, Sibelius, Grieg, Dvorak; Riccardo Chailly conducts the Concertgebouw Orchestra with Katia and Mariella Labèque, pianos, Puccini, Gershwin, Tchaikovsky (Wed and Thur), The Orlando Quay performs Haydn, Smetana, and Beethoven in the Recital Hall (Wed), (033435).

Kristian de Doelen, Lucy van der Horst, and Glen Wilson, harpsichord, Bach (Recital Hall, Mon); Rotterdam Philharmonic under Ivan Fischer, with John Mostard, bassoon, Haydn, Vivaldi, Bartok (Thur), (033411).

Utrecht, Muziekcentrum Vredenburg, The Hague Philharmonic conducted by Hans Vonk, with Rüdiger van der Meer, baritone, Mendelssohn, Cimarosa, Saint-Saëns, Bizet (Tue); The Orlando Quartet, Haydn, Smetana, Beethoven (Thur), (033444).

NEW YORK

New York Philharmonic (Avery Fisher): Zubin Mehta conducting, Gidon Kremer, violin, Schumann, Sofia Gubaidulina (Tue); Zubin Mehta conducting, Kurt Saksena, soprano, Elgar, Wagner, Strauss (Thur), Lincoln Center (793855).

WASHINGTON

National Symphony (Concert Hall): P.D.O. Bach conducting Pope concert with mixed programme (Thur), (2043778).

CHICAGO

Chicago Symphony (Orchestra Hall): Sir Georg Solti conducting, Shostakovich, Bruckner (Thur), (353122).

It may be a far cry from the Civic Theatre, Halifax, to the Festival Theatre, Chichester, but pantomime is the great audience leveller and any evidence of Mrs Thatcher's two nations of the North and South is hard to pin down. Halifax has hosted a professional panto for many years; Jack and the Beanstalk starring Helen Shapiro, Frazer Hines and Duggie Brown, is this year's main offering in the West Riding, for the Leeds Grand is occupied by Opera North, and the Bradford Alhambra is closed for repairs. Chichester's panto is now a fixture; Babes in the Wood, splendidly designed and costumed by Hugh Durrant, has a cast led by Spike Milligan, Evelyn Laye and Bill Pertwee.

The Civic is a cavernous Victorian bar which looks empty even with a moderately good audience. The Halifax locals are showing as much support for their show as they do for the football team on at the

Shay. Which is, in other words, not a lot. They should be ashamed of themselves. The sign is well up to standard, Trevor Bradford is a fine hissable villain and Helen Shapiro's Jack is a triumph. Hers is a splendid, musicianly voice. Having said that, a cow for a bag of gold (she thinks), Ms Shapiro sings "Walking Back to Happiness" as if she had just received the sheet music in the post that morning; good to hear, too, "You Don't Know." Best of all perhaps, is her cheerful admonition to the villagers of Ambrosia: "Let Yourself Go." Irving Berlin's classic standard from Follow the Fleet.

Certainly the Halifax audience, such as it was, was more robust than their Chichester counterparts. Respective ticket top prices are £4.75 and £7.50. Sensible, durable clothing in Yorkshire, whereas the South Downs yield lots of plectated skirts, nylon fur and little girls in velvet. The Chichester prin-

Pantomimes north and south

Michael Coveney

cial boy is Janet Mahoney, trouper enmeshed in a delightfully incongruous patriotic Act One finale full of spurious pomp and circumstance.

When you have a top class panto performer the script does not matter very much. The genuine star brings his own routine and, more importantly, draws up his own contract with the audience. This is as true of the best contemporary dames — Stanley Baxter and Rikki Fulton in Scotland are without rivals — as it is of the sheer comic genius of a performer like Frankie Howard or Spike Milligan.

Milligan's Spike the Stupid is a brilliant creation at Chichester, a childish baddie in a girlish wig and parti-coloured frock hanging on to Bill Pertwee's expert accomplice like an infant with its comforter. "What would you say to a little torture?" growls the Sheriff of Nottingham. "Hello, little torture" replies the serra-

phic Spike. This inspired display of controlled lunacy is a joy beyond measure. And how nice to see Evelyn Laye gaining her larger wings as the Fairy Queen.

But the show without MILLIGAN is hampered by the awful script of the alleged pantomime king, John Morley. This king is ripe for usurpation. I have no memory of anything witty or even pleasant in his pantomimes of recent years, and it is high time managements justified their large panto profits by hurrying on someone like David Wood or (why not?) Tom Stoppard for a fresh seasonal coat of paint. Children deserve nothing but the best at Christmas, and the Morley pantomime is anything but.

Frazer Hines as the Halifax Simple Simon is infinitely superior to the Chichester equivalent, Simon the Spyman (Peter Sowerbutts, embarrassing). Simon must always say "hiss" and elicit a response. This Mr Hines does, in agree-

able fashion, as well as handling children with tact and charm. We all stopped greeting Mr Sowerbutts after his third or fourth entrance. Duggie Brown is a lovely dame, posing the Halifax faithful in a rancorous, funny "strip" routine in the bedroom, an act Barrie Gosney's restrained Chichester dame hints at and then pusillanimously drops.

But if Milligan can get away with taming references to Robin's "Big Bum" in Chichester, why cannot the dame drop 'em? The answer to that is nothing to do with audience prurience, but with an actor's art. Milligan is a comic anarchist, a much loved jester, whereas Mr Gosney is a mere mortal jobbing talent who remembers that he is in Sussex and not, well, in Halifax. He should be bolder. They can take it, guv! As pantomime so gloriously confirms each year, in North or South, in East or West, we are all the same under the skin.

## FINANCIAL TIMES

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## Arms talks: a very long haul

THE ARMS control talks which open in Geneva today may mark the beginning of an important phase in the political relations between the superpowers, but they are unlikely to lead to rapid progress towards agreement on arms control as such. Probably the best that can be hoped for is that this first high-level meeting between the two foreign ministers will lead to a serious and consistent effort of negotiation, even if it lasts for many months, or even years.

The first obstacle to rapid progress is that leading figures in the Reagan Administration are deeply divided over the relative priorities to be accorded to arms control or national rearmament. For this reason alone, the U.S. team is unlikely to be in a position to offer unambiguous and plausible proposals across the entire gamut of issues which are bound to be on the agenda.

The second and related obstacle is that President Reagan's stated objective of developing a missile defence system, known as the Strategic Defence Initiative, explicitly aims to move away from the principle of mutual deterrence based on mutual vulnerability which has been the keystone of all arms control agreements since 1972. As a result, the central question facing the negotiators is whether they must go back to first principles in debating the essential ingredients of arms control, or whether the doctrinal implications of the SDI can be held over until later.

## Negotiations

At this stage, the U.S. programme of research into exotic technologies for space-based interception of missiles does not infringe the corpus of arms control deals for that matter, the Soviet Union has long engaged in similar research itself. But the Anti-Ballistic Missile Treaty of 1972 limits each side to one cluster of 100 anti-missile missiles, and requires new negotiations if missile defences based on new physical principles (e.g. lasers) should be created. What distinguishes the U.S. position is that the Administration is publicly committed to an objective which, if successful, would sweep away the ABM Treaty restrictions.

## Useful rethink on state industries

TWO HUNDRED years ago Dr Johnson noted that the prospect of being hanged in a fortnight concentrated a man's mind wonderfully. Today it would seem that a newspaper leak followed by a public row can achieve almost exactly the same results with politicians and Treasury mandarins.

The Treasury's latest proposals for updating the statutory framework under which Britain's nationalised industries operate certainly appear to have benefited greatly from a couple of months' careful thought.

Last autumn the Treasury was forced to shelve its original plans for putting the Government's relationship with some 20 state corporations on a more consistent footing — backed with new, formal legal powers.

Outraged state industry chairmen complained at the time that the first set of proposals were at best half-baked and at worst a thinly-disguised attempt to put the nationalised corporations firmly under Treasury control. Yet even the most stringent of the Treasury's critics admitted that the present legal framework was a jumbled, inadequate and often outdated mess.

The new consultation document issued at the end of last month after a Treasury rethink puts forward a number of sensible suggestions for reform. The document addresses itself to five areas: borrowing and guarantees; accounts, reports and audit; financial targets; balance sheets; and the terms of appointment of state industry board members.

The proposal for introducing greater consistency into the presentation of state industries' reports and accounts is certain to be widely welcomed. This suggestion was one of the few to be given general acceptance when the Treasury came up with its original scheme last year.

Nor is there likely to be much controversy about the latest recommendations for seeking chairmen and board members — a cause of much flustering in the dovetails last year. The idea now is that board members

negotiators is how to handle a problem which is both present, in the U.S. President's intentions, and yet also far distant and speculative.

It is probably fear of American technological prowess, as much as anything else, which has lured the Russians back to the negotiating table. They have made it clear that the talks must cover defensive as well as offensive systems; for if the U.S. should steal a march by developing an effective defensive system first, the Soviet Union would have no incentive to agree to cuts in its offensive weapons; on the contrary, unless it saw a way to negotiate a smooth transition to a situation in which both sides had effective defences, it would have reason to multiply its offensive weapons to swamp any possible U.S. defence. In other words, the main danger is that we could be facing a fresh arms race of an entirely new order of magnitude, rather than a reinforcement of the arms control regime.

## Implications

Ostensibly, the U.S. administration accepts that the new "umbrella" talks should lead to negotiations on defensive and offensive weapons. At one time, indeed, it looked as though the American research programme might be a bargaining chip in the negotiations, starting with the anti-satellite weapon now in the testing phase. But the most recent pronouncements from the White House show the President remains firmly committed to the defensive objective, and that what is on the table is only an offer to discuss the implications of defensive technologies, in the hope of managing the transition from mutual deterrence to mutual defence.

Such a transition would be extremely difficult to manage from a technological point of view. It would also require a much greater degree of political trust than has ever existed between the two superpowers. It is therefore possible that the Russians are preparing for a very long negotiation, in case President Reagan's successor should take a different view of the issue and its implications. It is likely they will press for a tightening up of the ABM Treaty, which comes up for review in 1987; and it is virtually certain that they will maximise their propaganda, especially in view of achieving the financial targets laid down by Ministers.

State corporations already have financial targets—usually a specified rate of return on assets spanning a three to five year period and set after consultation with the industry concerned. But in many cases the financial targets are not legally enforceable.

There would seem to be some merit in drawing financial targets inside the legal framework for state industries' balance sheets. The idea is that it should become possible for all or part of a state company's reserves to be capitalised as debt and public dividend capital.

The net effect of this could be that the profitable industries—such as gas and electricity—could start paying a dividend to the Government instead of being forced to hand over slices of their reserves by way of a negative external financing limit, the mechanism which currently forces them to "lend" money to the exchequer.

This measure could go some way to ending the well-publicised bagging that goes on at present over EFLS and over such things as energy price rises. It could also achieve the Treasury aim of improving financial discipline within the profitable state industries themselves.

But the latest recommendations would seem to offer not only a much-needed element of standardisation within the state sector but also the opportunity for greater commercial stability.

INTENSE behind-the-scenes negotiations are now going on to prepare the ground for the Government's new framework of investor protection. It may well take another two years before all the required legislation is in place (see below). But the aim is to set up and begin to staff the key organisations within the next few months.

If the elaborate plans work, investment scandals like the collapse of M. L. Duxford or Norton Warburg, or the disappearance of financier Keith Hunt, will be much less likely to happen. And, in any event, investors will be much better protected through compensation and other arrangements.

The crucial challenge for the Government, however—and, more particularly, for the Minister responsible, Mr Norman Tebbit, Secretary of State for Trade and Industry—is how to strike a credible balance between self-regulation—the supervision of practitioners by regulators drawn from within their own ranks—and statutory control of the exercise of Government power through the law of the land.

In drawing up the White Paper on the subject which will appear later this month, Mr Tebbit will have to consider the City that it will still be operating a system of self-regulation while, at the same time, reassuring Parliament and the public at large that he is strengthening statutory responsibility for the protection of investors.

Self-regulation has the advantage that practitioners are more likely to be able to spot wrongdoers and can react very quickly to breaches of rules. They can impose flexible and easily changed codes of conduct, whereas Governments have to act through a creaking legal framework which may get years out of date.

On the other hand self-regulation depends upon the practitioners being concerned with the public interest. It is only human nature, however, that they should be tempted to use their self-regulatory powers to discriminate against those

offering innovation or uncomfortable competition. In practice, the Government needs the City's co-operation. Otherwise Mr Tebbit would have to organise a vast complex supervisory network himself. The Department of Trade was humbly told by one leading merchant banker that he would be willing to second staff to a new watchdog agency if it operated on the basis of self-regulation. If it was statutory, he would not.

At the same time, Mr Tebbit cannot simply hand over statutory authority to a group of self-appointed self-regulators. He would be howled down by Parliament if he did.

The plan is that legislation will define the kind of bodies to which Mr Tebbit can delegate authority. The Secretary

of State will retain key rights to appoint members of the bodies. And the agencies will be required to deliver annual reports to Parliament on their stewardship. Moreover, they will be monitored closely by the Office of Fair Trading to make sure that they act in the public interest, and not out of self-interest.

But apart from all that, the agencies will be given more or less a free hand to run their own show—which will include financing themselves, probably out of levies on investment transactions.

They will act through a whole range of second-tier agencies. Some of these, notably the Stock Exchange, already exist. Others will need to be converted from trade associations into self-regulatory agencies with teeth.

As an answer to such conflicts, there is much talk of "transparency," a buzz word which covers the availability of information—sometimes freely published, sometimes kept confidential, but at any rate available to official investigators pursuing an audit trail in cases where malpractice may be expected.

This area of transparency is one in which the City's new regulators will have to fight hard. The financial markets have been traditionally secretive so that in the Stock Exchange for example, hardly any information on dealings is available, in notable contrast to what happens in New York.

To help them in such battles the regulators will have considerable authority. They will have the power to issue or withdraw the licences which

will be required under statute by various types of practitioners. They will also have the power to fine people who trade improperly (though there will be a right of appeal to an Appeals Tribunal).

It is not going to be easy to strike the right balance. In the City, there is considerable suspicion of the nature of new-style "self-regulation." If the members of the new bodies are effectively going to be appointed by the Secretary of State, alternative schemes whereby the directors of the agencies could be appointed only by practitioners, but have been examined by the Department of Trade, might not be any serious problems with Mr Tebbit. But there is bound to be concern in the City about what might happen if some body like Mr Tony Benn were to become Secretary of State.

Meanwhile City practitioners continue to argue that the Government is still falling down on what is unquestionably its own responsibility, the enforcement of the law through the courts. It remains notoriously difficult to secure convictions in cases of financial fraud.

Recently the Department of Trade has made an attempt to bring the prosecution of fraud more fully within its own orbit, rationalising a situation in which responsibility is awkwardly shared with the Director of Public Prosecutions and the police Fraud Squad. This regrouping would more closely resemble the practice of the Securities and Exchange Commission in the U.S., where an active enforcement division undertakes prosecutions in support of the SEC's regulatory functions.

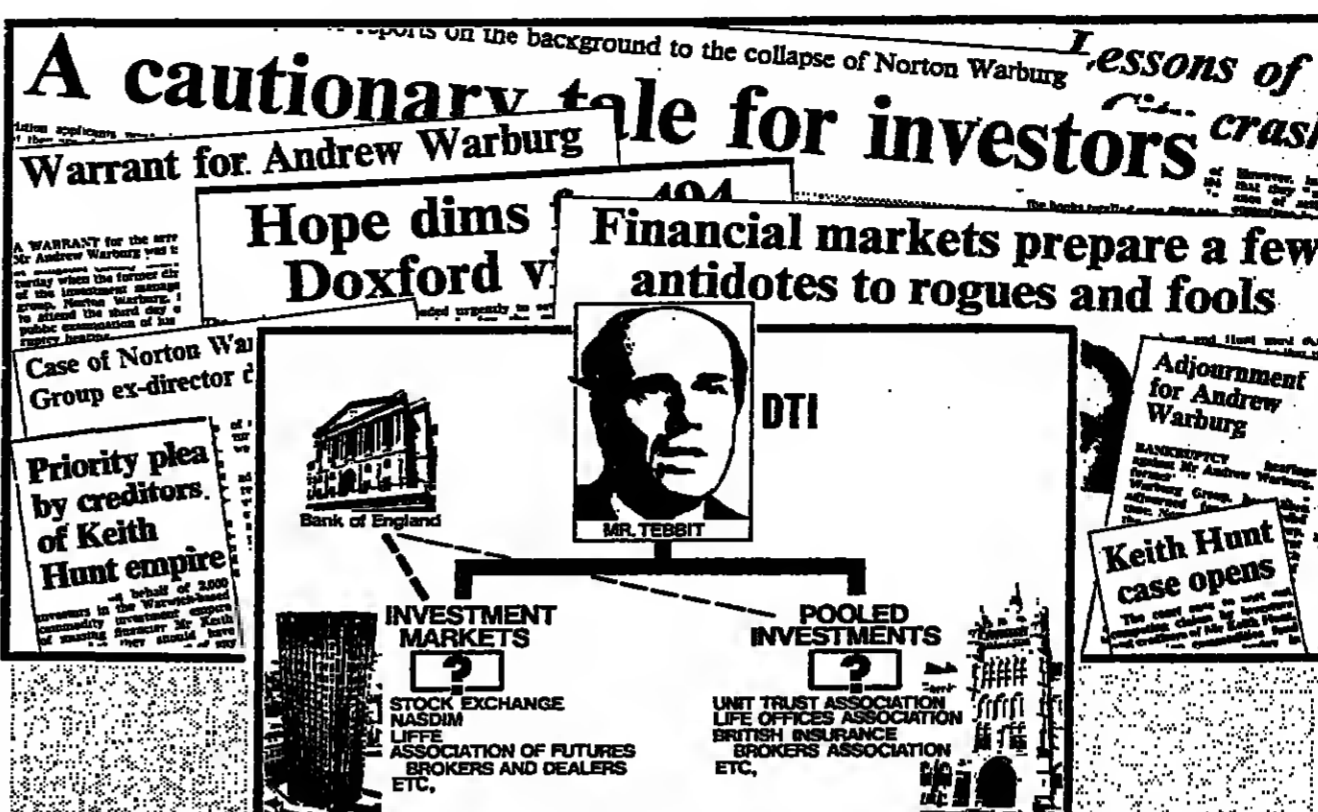
But the police and the DPF have firmly told the Department that they wish to maintain their independent roles in this area, showing how risky it is for the Government even to get its own act together.

This only underlines the size of its task in persuading the practitioners of the investment markets to co-operate with any enthusiasm for ushering in a new era for investor protection.

## UK INVESTOR PROTECTION

## A delicate balancing act

By Barry Riley, Financial Editor



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will be taking over responsibility for existing agencies, notably the City Takeover Panel.

But a much broader apparatus will need to be in place by the time the major changes in the structure of the Stock Exchange take place, changes which are expected to happen some time in the autumn of 1986.

If all goes well, this Stock Exchange "Big Bang" will coincide with the enactment of new investor protection legislation. But it is not clear if the Queen's Assent might not be received until the beginning of 1987. Nevertheless, the key functions of the main watchdog body will be required to be in place by the date of the Big Bang.

## WHY THE WATCHDOG SHOULD BE READY FOR THE 'BIG BANG'

At the heart of the new framework for investor protection is a plan to devolve much of the day-to-day responsibility for supervision of the investment markets to two new private-sector bodies. But at the same time the ultimate responsibility will remain with Mr Norman Tebbit, the Secretary of State for Trade and Industry.

Exactly how the Department of Trade and Industry can delegate these responsibilities and endow private-sector bodies with the statutory powers which they will need to assert their authority is yet to be clarified. It could prove controversial when the legislation comes before Parliament in the 1985-86 session. Some time later this month, the Government will publish

a White Paper on Investor Protection which will set out the DTI's plans in great detail. It will not, however, spell out the exact number and nature of the watchdog agencies, concentrating rather on a more general description of the way in which they will be set up.

Two is thought to be the appropriate number in present circumstances. This emerged from discussions in the summer with City lawyers, including a leading party set up under the chairmanship of Mr Marshall Field, chief general manager of Phoenix Assurance and former chairman of the British Insurance Association, and the Governor of the

Bank of England who in turn consulted a Governor's Advisory Group consisting of ten leading figures from the financial markets.

Already the Department, in close co-operation with the Bank of England, is taking steps to form the new supervisory agencies which will act as watchdogs to protect investors.

The larger of these bodies will be an umbrella agency which will regulate all the City of London's main investment markets. It will supervise the Stock Exchange and will take over much of the responsibility for monitoring licensed dealers in securities. In addition it will regulate the various financial and commodity futures markets,

which until now have been largely outside any form of statutory regulation.

A second body will be more narrowly based, being responsible for pooled investment products including unit trusts and life assurance policies. In many respects these have already been effectively regulated by the Department of Trade. But there is now concern that the marketing of such investments needs to be more closely controlled.

Abolition of tax relief on life assurance has made such contracts almost directly competitive with unit trust investments, and there is controversy over the way that unit trust selling commissions are being driven up as a consequence. Elsewhere, the Government wishes to encourage more people to take up personal pensions contracts—but it is also discussing ways of controlling the high pressure selling techniques which are a feature of this sector.

It is intended that the names of the chairmen of the two new bodies will be announced shortly after the White Paper is published. Two organising committees are being formed to plan the creation of the two bodies in more detail. Before long, the names of the two agencies can be expected to emerge.

The plan is that key functions of the larger agency will be in place comparatively soon—before the end of 1985, at any rate. To some extent it

is supposed to manage the rest of the organisation. He is experienced in local government, having made his name—in civil service terms—with difficult legislation following the Clay Cross affair.

Geoffrey Chipperfield, another deputy secretary who is currently number two at the Property Services Agency. Generally agreed to be "brilliant," he was once leading Helser in the promotion stakes. With hopes of becoming head of the PSA, he might not welcome a shift sideways now.

David Pickup, the senior under-secretary at present in charge of implementing the abolition of the GLC and the metropolitan counties. He has been a regional director and has considerable experience on the housing front. A good all-rounder.

Peter Heiser, currently the man with the most up-to-date knowledge of the issues. But he was only promoted under-secretary in 1980, and it would be unusual if he were to take another step up so quickly.

Heiser, himself, will have an influential voice in the appointment. He has gained quite a reputation for spotting talent—and promoting it.

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## U.S.-SOVIET ARMS CONTROL TALKS

## Risks and rewards for Reagan

By David Buchan and Stewart Fleming in Washington

MR GEORGE SHULTZ, U.S. Secretary of State, and President Ronald Reagan's top foreign policy adviser, launches today in Geneva one of the two key presidential policy initiatives which promise to influence the course of the President's second term of office and perhaps determine his place in history.

Leaks to the press have already exposed the outlines of the first of these initiatives, one which is in danger of falling on stony ground: the White House plan for tackling the federal budget deficit.

The second, which Mr Shultz will lay before Mr Andrei Gromyko, the Soviet Foreign Minister, in what President Reagan hopes will be a series of meetings with Soviet officials, is a radical new approach to arms control negotiations. And the White House has made no secret of just how radical.

The President is seeking to engage Moscow in the most wide-ranging arms talks since the early 1970s, which will encompass both offensive nuclear missiles and defensive systems designed to thwart a nuclear strike. Indeed, the President

today. They help to explain why he has been cautioning against the anticipation of early and rapid progress and why Administration officials have been seeking to dampen the high hopes which are being built up around the brief two days of talks.

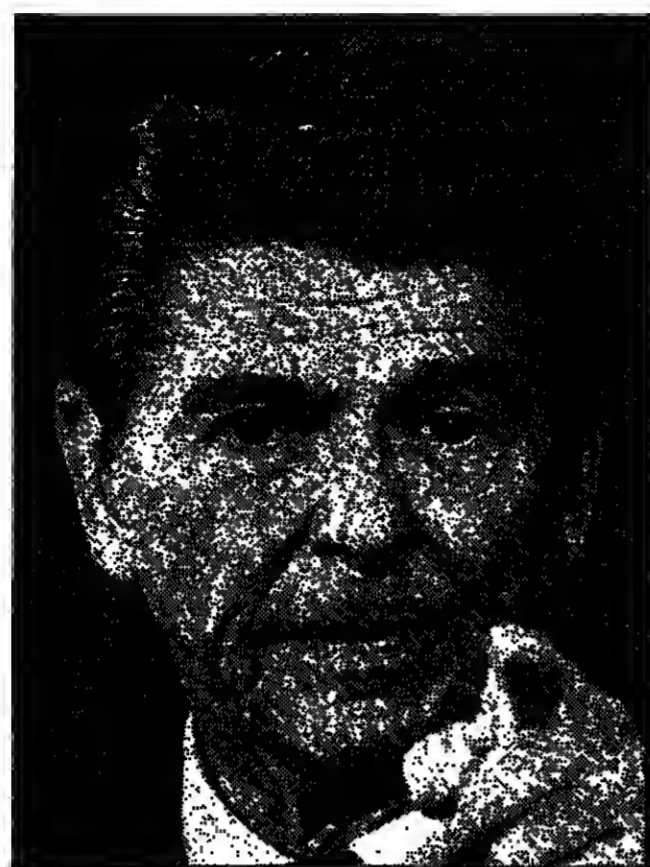
Despite the risks, both inside and outside the U.S., there is widespread relief that the Superpowers are talking again, and not just in Geneva. Quietly, a U.S. Government team headed by Mr Lionel Olmer, Under-Secretary of Commerce for International Trade, is this week slipping into Moscow to conduct the highest level economic talks between the U.S. and the Soviet Union since 1978.

The Russians are expected to ask Mr Olmer for assurances of sanctity of contract to back up their badly needed capital equipment purchases from the U.S., something which has so far only been given in relation to U.S. grain exports.

Administration officials concede that private contacts in recent months have encouraged them to believe that the arms talks make sense. But privately they admit to being worried that they may be being lured into a forum which will degenerate again into a sterile propaganda war.

U.S. insistence on bringing defensive weapons to the negotiating table and part of the argument it is making to back up this decision, namely that the Soviet Union is violating existing arms control agreements, is doing so on some of its own defensive systems, serve to emphasise the distrust which exists.

Controversy about the "Star Wars" programme is not limited to the U.S. and the Soviet Union. Some of Mr Reagan's Western allies harbour profound reservations about space-based, defensive weapons. They fear that their development will set off a new and infinitely more costly arms race, which they worry that such weapons will undermine the existing structure of nuclear deterrence which British officials, for example, say has worked "brilliantly" in preventing a nuclear war since World War Two; and they fear that SDI will become a programme which could help to remove America's nuclear umbrella from over Western



President Reagan: cautioned against hopes of rapid progress

Europe's head and "de-couple" the alliance from the U.S.

Administration officials are arguing that defensive weapons are already an arms control problem of the 1980s and that the Soviet Union has been spending more heavily on them than the U.S. One of the major incentives for the U.S. and the Western allies to enter into arms talks is the opportunity which now seems to exist to halt further offensive nuclear weapons deployment and—

U.S. officials say that they are determined to be "flexible" in discussing the possible alternative methods for conducting talks, although they have made public their preference for two sets of negotiations: one on offensive weapons, with the offensive talks maintaining the distinction between intermediate and longer-range missiles. They also want some form of "umbrella" struc-

ture to link the various discussions. But outside the Administration there are widespread doubts about whether its new arms control initiative will be any more fruitful than the talks which ultimately failed in the first Reagan Administration.

Since then, Mr Shultz, who is now less involved with the Middle East and more firmly in the saddle within the Administration than at any time since he took over from Mr Alexander Haig in 1982, has been able to play a bigger role in formulating arms control policy. Indeed, his growing strength within the White House as an advocate of pragmatic and moderate views has infuriated right-wing supporters of President Reagan, who have been weakened by the departure last week of Mr William Clark, by the imminent shift to the Justice Department of Mr Edwin Meese and by their inability so far to propel Ms Jeane Kirkpatrick, the UN Ambassador, into a new top level White House foreign policy post.

Mr Shultz's comfortable working relationship with Mr Robert MacFarlane, the President's national security adviser, has also helped to strengthen his position, and the appointment of Mr Paul Nitze as his adviser for the arms talks was seen as another blow for the ideological opponents of arms control.

Having said this, however, the fact remains that the enemies of arms control negotiations remain a force to be reckoned with. Mr Richard Perle, the Assistant Secretary of Defence who is seen to have more influence on U.S. policy towards the Soviet Union than any other Administration official in the past four years, has sent a forceful reminder of this. In a lengthy interview in the Washington Post last week, Mr Perle ruthlessly pelted out his continuing opposition to arms control in a statement which subsequently drew an explicit statement from a senior Administration official dissociating the

President from the remarks.

It is clear, however, that arms control opponents within the Administration are simply biding their time until they have some real targets to shoot at, assuming that is, that over the next 12 months today's meeting does indeed lead on to serious negotiations.

Partly because of the divisions within the Administration, it is accepted that the success or failure of the arms talks will hinge crucially on the attitude and, importantly, the active involvement of President Reagan. The President is now saying that he will back the talks "seriously and zealously," a position which contrasts with his past opposition to arms agreements. One widely held view of his commitment is that he, and particularly his wife, Nancy, have an eye on the President's position in history and want to see him go down as a peace President.

Many arms control experts are arguing that, partly because of the divisions within the Administration, presidential participation will be needed to keep any talks moving, and presidential participation at a much deeper level than Mr Reagan

customarily gives to policy issues. Having pushed this far ahead in pursuit of arms control talks, it would be a serious blow to presidential prestige for them suddenly to collapse, and it would damage the political momentum which he has drawn from his sweeping election victory in November.

Mr Reagan is already in one sense a "lame duck" President because, by law, he cannot be re-elected. But there is a distinction to be made between being nominally a lame duck and being a lame duck in reality. Many shrewd observers of the American political scene argue that it could be two years before the lame duck tag begins to erode the President's power.

But that period could be shortened considerably if the arms talks fail, no progress is made on reducing the budget deficit and if Mr Reagan is seen to be backing policies which have no chance of success.

One reason for the modesty of the effect is that lower pay is supposed to drag down nominal demand by at least 2 to 3 per cent. In the second column accordingly, action is

## Lombard

## How to boost the pay-jobs link

By Samuel Brittan

TOWARDS THE end of 1984 we had a spate of reports claiming that various forecasting models supported, refuted or — most often — gave only weak support to the link between real pay and jobs.

Most large-scale models are not designed to test or measure the pay-jobs relation. They were primarily designed for short-term forecasting in which demand effects tend to predominate.

Many of what purport to be real wage effects are the indirect effect of nominal wage changes on other variables such as international competitiveness or government spending in a cash planning system.

Nevertheless the EEC Commission has made a valiant attempt to construct four forecasting models used in the Euro-link system to exhibit aspects of the pay-jobs link (Annual Economic Review, 1984-85). To obtain worthwhile results a new version of the UK model had to be inserted, as in the main version there is (as in the Treasury model) zero sensitivity of employment to real pay changes.

The results are worth exhibiting mainly because they illustrate the interaction between demand management policy and the real wage factor, which some people find so puzzling.

The Commission carried out several alternative simulations. It assumed that nominal wages were by some stroke of luck or policy (called a "shock") held 5 per cent below the level envisaged in its base forecasts for the next four years. In the table the effect at the end of four years is shown, but the most important effects are already in evidence after three years and quite a lot appears after two.

In all the simulations real wages are also restrained, although not as much as money wages. In the first column of the table it is assumed that there is no other policy action apart from the wage restraint. There is then an increase in employment but of a modest kind.

One reason for the modesty of the effect is that lower pay is supposed to drag down nominal demand by at least 2 to 3 per cent. In the second column accordingly, action is

taken, not to "boost nominal demand" in the conventional sense, but to prevent it from falling below the path previously projected. In a third simulation (not shown) it is assumed that this demand support is undertaken by West Germany, France, the UK and Italy together, thus reducing the budgetary and balance of payments cost.

The effect of sustaining nominal demand is to double or treble the employment effect. For the EEC average a 5 per cent "cut" in nominal wages is then associated with a 3 per cent cut in real wages and a 3½ per cent gain in employment.

The average EEC job effect is at the upper end of the range suggested by the British Chancellor, suggesting a real jobs elasticity of one if nominal demand is maintained. This is probably more reliable than the estimate for any one country.

The main use of these simulations is simply to illustrate that both real wage restraint and demand management are mutually supportive aspects of employment policy: provided that demand management is carried out in nominal terms, which avoids inflationary risk.

The British Chancellor would say that his own Medium Term Financial Strategy (which the simulations do not attempt to reproduce) will itself maintain nominal demand. This may be true, depending on exactly how the strategy is interpreted. Why not remove the room for doubt, by spelling out the intention directly and not merely by the mumbo jumbo of frequently altered monetary targets?

NOMINAL WAGES 5 PER CENT BELOW BASE PROJECTION			
	(1)	(2)	
% effect after four years	Isolated action	Nominal GDP maintained	
EEC average consumer prices	-2.3	-2.0	
UK prices	-3.5	-2.1	
EEC average real wages	-2.6	-3.1	
UK real wages	-1.5	-2.9	
EEC average employment	+1.3	+3.5	
UK employment	+1.9	+4.3	
EEC average current balance	-0.2	-1.0	
UK balance	0.0	-0.7	

Sources: EEC

## Golden goose dead

From Mr J. Woodthorpe

Sir,—The TUC, and Mr Gregory (December 24), are right in thinking that cuts in real wages won't make much impact on unemployment, but, as usual, for the wrong reason. Clearly the TUC is deliberately missing the point on unit costs when arguing that much higher European wage levels give plenty of room for real increases rather than reductions. Helpful though reductions might be in improving our grossly high (in the light of our low productivity/low wage levels) unit costs, the simple fact is that hardly any major UK employer is planning to increase significantly the number of his employees in this country.

After nearly 40 post-war years of virtually unceasing concentration on job protection and resistance to productivity improvements, the unions have finally killed their golden goose. With the persistent and persistent reminder of archaic NUM leadership attitudes in the background, coupled with the knowledge that the pay of their present employees increased by 7.5 per cent on average in the last year, it is really surprising that many industrial leaders rather than increase their dependence on their UK operations, seek to reduce it, and instead look overseas to acquisitions and new ventures for profit growth. Nor in repurchasing their equity to use up idle funds are they imaginative: on the contrary, in redistributing their equity when faced with over-expensive acquisitions abroad, or the probability of unremitting industrial relations trench warfare at home, they are simply realists.

The one overriding reality that the TUC has yet to appreciate is that its historically negative objectives and attitudes are more than ever inappropriate today to its members' needs. The best hope of securing employment for the membership, let alone gaining real wage increases, lies in positive and lasting co-operation with management to improve productivity, raise quality standards and lower unit costs. Some smaller, further-sighted unions have already learned this lesson from their competitors abroad, but until the bigger, more myopic ones do the same, there is little hope of new employment for the majority of their unemployed members.

John Woodthorpe, 54 Eaton Place, SW1.

## Spend, spend and borrow

From Melissa Graham

Sir,—Mr Phauze (December 29) may be reassured to know

that across the Atlantic the citizens are doing just what he suggested.

In the first half of 1984 consumer credit outstanding in the U.S. rose at the record annual rate of 10.6%. This is twice the rate of 5.3% in the first half of 1983 and double the previous record rate which caused the economy to peak in the fourth quarter of 1978.

It increases total consumer credit outstanding by 20 per cent and adds \$2,000 or 15 per cent to median family income. It is equivalent to approximately a 50 per cent increase in the income of the threshold taxpayer in this country where the "spurge" in consumer credit outstanding in the first half of 1984 was \$500m.

Concurrently family mortgage debt also increased at a record rate. It rose \$156bn in the period—80 per cent above the 1983 rate and 20 per cent above the previous 1979 record.

All this was undertaken without any encouragement from the Government. Understandably so since it raises the question "Who is crowding out whom?"

Total U.S. debt increased over the period at an annual rate of \$812bn and is estimated to approximate \$8 trillion (million million) at year end 1984. Of this Federal debt is estimated to approximate \$1.6 trillion and corporate \$2.1 trillion.

To get the answer to the question requires buying a return ticket of course on credit. You ain't seen nuttin' yet! Melissa Graham, 40 Morris Road, Lewes, Sussex.

For 21 African countries with

abnormally high cereal import requirements in 1984-85 FAO currently estimates food aid requirements at around 5.2m tons, of which 3.7m have thus far been covered by pledges.

The latest available information indicates that total cereal food aid shipments to the world as a whole are now likely to exceed 10m tons for the first time since the World Food Conference established this as a desirable target over a decade ago.

Barbara Huddleston, Via delle Terme di Caracalla, 00100 Rome

## Applause at the opera

From Mr M. Vorcoe-Cocks

Sir,—Mr Shovelton (December 27) describes opera house applause after an aria or in the middle of an act as "disturbing interruptions" and is glad this "Continental habit" has virtually died out at Covent Garden. I too would prefer to hear each act of an opera undisturbed, but I have accepted that going to the opera is a shared audience experience and that when something is particularly good or exciting the audience will release its tension by applause without waiting for the end of the act or, sometimes, the end of the aria. Mr Shovelton would treat such applause like those who dare to applaud after a movement of a symphony who are "highly frowned upon and silenced." This silencing usually takes the form of competing hissing and "shushing" which is even worse.

This sort of applause is usually confined to Italian 19th-century opera by composers who knew perfectly well that the dramatic flow would be thus interrupted and who in many cases would have been very disappointed at any other reaction as they had constructed the aria with that express purpose in mind, especially in such arias as the Brindisi in "La Traviata" and the most famous aria of all, "Rigoletto."

Wagner operas are considered immune to such interruption, but earlier this season the Metropolitan's audience in New York was roused to an ovation by Eva Marton's thrilling account of Ortrud's second act outburst of vengeance. My first reaction would have met with Mr Shovelton's approval, but I have a suspicion that Wagner would have been delighted that the audience had been moved to such an unconventional

response.

I (and Mr Shovelton) can listen to opera at home undisturbed on record/cassette/compact disc, but nothing beats being with and part of an audience and if it responds to excellence with a demonstration of approval so much the better. What I find much more annoying (because the remedy is so simple) is the continued habit of most houses, Continental and Covent Garden, of bringing down the curtain before the music has finished so that the final bars are almost invariably drowned by the Pavlovian applause induced by the first two bars of the curtain.

Michael D. Vorcoe-Cocks, 3, Onslow Court, Drayton Gardens, SW10.

## Generating wealth

From Mr J. de Rivaz

Sir,—I refer to Mr Prowse's article "A startling but simple idea for Mr Lawson (December 21) about the tightening of capital taxes to reduce higher rate income tax. This would effectively mean that the country would be living off its capital rather than off its income. Eventually the capital base would be destroyed, and the income would presumably cease. Such a system may favour highly paid professionals initially, because they require no capital of their own and they create no real wealth. But eventually the capital base is eroded, they would have fewer and fewer clients to live off.

Abolish capital gains and transfer tax. Tax the whole amount of any capital realisation as income. Make every investment tax deductible. Investments could be defined so as to channel capital into wealth producing sectors, eg manufacturing. Instead of areas such as antiques or works of art, where the sole aim is speculation.

Professionals in the capital transfer tax avoidance industry would lose their jobs, but there would be a wider scope for professional advisors to help clients move their portfolios more actively to maximise the profit. In a market economy, this would mean that capital is always moved to where it generates the most wealth.

Admittedly it would be possible for people to inherit wealth. If they were to spend it however, they would be taxed at income rates. Therefore they would be encouraged to save it. Surely it does not matter whose names are on share certificates as long as funds are not taken out of wealth creating sectors of industry to be wasted on consumables or services? John de Rivaz, West Tower House, Portlough, Truro, Cornwall.

## WE STOP AT NOTHING

## MONDAY'S MEETINGS

- 8:30 a.m. Cornwall Communications Ltd - directors' plans for USM listing (take our new USM video).
- 10:30 a.m. Office - presentation on P.W./Reuters Treasury Management Workshop (Speak to Graham Davis, Brown International, re February course).
- 12:00 a.m. Review progress on George Brightwell Engineering audit.
- 12:45 p.m. Lunch - Chamber of Commerce - Fothergill re Freeport seminar.
- 2:30 p.m. Industry Specialists meeting - Building Society developments, 1985.
- 4:00 p.m. Hilary Longton - staff appraisal/counselling.
- 5:00 p.m. To Lane Industries - present results of VAT study.
- 7:30 p.m. Office - pick up 2nd draft of Windsor Chemicals annual report (Board meeting tomorrow).
- 9 p.m. Nothing.

Price Waterhouse  
Business Needs Experts.





# SECTION II - COMPANIES AND MARKETS

## FINANCIAL TIMES

Monday January 7 1985

KIVETON PARK STEEL

BRIGHT FREE MACHINING STEEL  
FOR FORGING, UPSETTING  
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## Upset likely on multi-year reschedulings Yankee bonds end year as best performers

BY PETER MONTAGNON, EUROMARKETS CORRESPONDENT, IN LONDON

ANOTHER disappointment is in store for those commercial bankers who have been hoping ever since last year's London economic summit to see industrial country governments live up to their promise of multi-year reschedulings for the debt-ridden countries of the developing world.

Yugoslavia's leading commercial bank creditors tomorrow begin a final round of talks in London that is expected to lead to agreement on terms for rescheduling some \$3.4bn in debt falling due between now and the end of 1988. They will do so, however, against the background of a refusal by creditor governments to do any more than reschedule official loans falling due in 1985 alone.

Yugoslavia's deal thus seems likely to confirm the pattern set since the London summit whereby banks move ahead with multi-year packages while governments hold back. Yugoslavia had been regarded as a test case in this respect not only because of the traditionally close operation between banks and governments in dealing with its problems, but also because of the relatively high weighting of official loans in the country's total \$20bn foreign debt as well as the strategic

importance of Yugoslavia to many industrial government creditors.

In fact, these creditors' determination to stick to a one-year programme for Yugoslavia is not a simple question of governments refusing to use more than an absolute minimum of taxpayers' money in dealing with the debt crisis. Some European governments were willing to consider a multi-year package, but strong objections came from the U.S.

The U.S. is worried about setting a precedent in Yugoslavia that larger debtors in Latin America might seek to follow. Tying up a multi-year government deal for Yugoslavia might, the U.S. argues, limit its freedom of negotiation with Brazil in particular, and it is to those talks later in the year that bankers are now looking for a test case of government willingness to follow banks into multi-year rescheduling packages.

Meanwhile, Yugoslavia's creditor banks have had to abandon their original hope of securing a deal that would be matched in scope by government creditors. They have, however, successfully insisted that the country seek a new standby credit from the International Monetary

Fund (IMF), the terms of which are expected to be finalised shortly.

Like the government rescheduling, this deal will, however, be of one year's duration only, which means that the banks, in committing to a long-term package, are once again going out on a limb compared with other creditors. Because of this, they are likely to seek certain safeguards at this week's talks, some of which could set new precedents for bank rescheduling packages.

For example, the banks want the rescheduling to be implemented in stages rather than all at once as soon as it is signed. This would allow them to draw back from the deal in the event of adverse political or economic developments, and it reflects a precedent already established with Mexico's \$48.7bn rescheduling agreed in principle last August.

Where the two deals are likely to differ significantly, however, is in their treatment of the borrower's continuing relationship with the IMF. Mexico has agreed to a close IMF monitoring of its economy once its present standby arrangement expires at the end of this year. In Yugoslavia's case, the emphasis

is likely to be different and new. Bank creditors are seeking as part of their agreement a formal commitment from Yugoslavia to seek a new IMF arrangement if it fails to live up to a number of specific economic targets.

These targets will relate to the level of the country's foreign exchange reserves, export growth and the trend of the balance of payments, and they still have to be set, which is one reason why this week's talks may take several days. Also still to be set this week are the precise terms of the rescheduling including interest margins.

In this context Yugoslavia can plead favourable treatment because of its success in improving its balance of payments. The current account surplus is estimated at \$680m for 1984, \$1.6bn more than forecast under its existing IMF programme. This year it should rise further to at least \$750m, bankers say. Yugoslav projections put the surplus even higher at \$850m to \$900m.

Elsewhere, the Eurocredit and Euronote market got off to a relatively quiet start in 1985. Among the few developments were a \$305m refinancing for Italy's state electric company Enel and an Ecu 100m Eu-

ronote facility for the European nuclear power concern Nersa.

Enel is restructuring part of a \$1bn deal originally arranged through Bank of America in 1977, but after its difficulty refinancing a deal led by Deutsche Bank and Banca Commerciale Italiana last year, it has chosen to concentrate only on that part which is priced at a margin over U.S. prime rates, currently 1/2 point. This portion which was due to mature in two years' time will now have an eight-year life and bear interest at a prime itself.

The London interbank offered rate (Libor) portion, which carries interest at a margin of 1/2 point, is being left untouched.

Société Générale de France is leading the 10-year facility for Nersa which is guaranteed by power utilities in France, Italy and West Germany. It has a 10-year life which can be extended to 12 of 15 years at the option of the banks. Terms provide for the sale of Euro-notes at a maximum yield of 1/2 point over Libor, and there is an annual facility fee of 1/2 point as well as a front-end fee of 20 basis points for lead managers.

BY OUR EUROMARKETS CORRESPONDENT

U.S. DOLLAR bonds outstripped all other major international capital market instruments in terms of total return last year, according to a new study by the U.S. investment house Salomon Bros.

The best performing issues in any market last year were Yankee issues (foreign bonds issued in the U.S.) which offered a total return of 15.9 per cent, Salomon Bros. says. This is the first time that a U.S. dollar instrument has topped the league since it started compiling records in 1978.

EUROBOND TURNOVER (nominal value in \$m)			
	Credit	Export	Other
U.S.S. bonds	3,650.5	n/a	n/a
Last week	4,040.5	18.483	
Other bonds	1,066.0	n/a	
Last week	977.3	1,135.9	

has not been much of a rally in non-dollar markets, according to its figures.

All fixed-rate dollar bonds showed strong gains last year, it said, with Eurobonds offering a total return of 14.7 per cent and U.S. Treasury bonds 14.3 per cent. This is in marked contrast to sterling issues, one of the weakest performers anywhere in dollar terms.

A dollar-based investor who purchased UK government securities at the start of 1984 would have lost 13.1 per cent of his money by the end of the year even after accrued

interest. Swiss franc government bonds fared even worse, offering a negative total return of 14.6 per cent.

Only Canadian dollar issues came anywhere close to the U.S. currency in terms of total return after currency adjustment. Euro-Canadian dollar bonds offered a total return in U.S. dollars of 9.7 per cent. Elsewhere Euroyen bonds offered a positive return of 2.1 per cent and French franc issues 1.8 per cent but dollar returns were negative in all other currencies surveyed.

The Salomon Bros figures show how devastating the effect of the dollar's rise has been on international investments. In purely sterling terms, for example, gilt-edged issues offered a total return of 8.9 per cent last year. But an investor who diversified out of sterling into other bond markets on a weighted basis according to their size would have earned four times more - a total return in sterling of 35.5 per cent.

## Sallie Mae starts year with novel Y25bn issue

BY OUR EUROMARKETS CORRESPONDENT

LESS THAN a week into the new year the Eurobond market has already been presented with its first novelty of 1985 in the form of a Y25bn Euroyen issue for Sallie Mae, the Student Loan Marketing Association of the U.S.

This is the first time that a quasi U.S. government agency has issued a Eurobond in a currency other than the dollar. It comes in the format specially targeted for non-U.S. investors already established in the Eurodollar market by borrowers such as the Treasury and the Federal National Mortgage Association.

Bankers believe that the use of the yen market is a natural extension of the new freedom to borrow abroad bestowed on U.S. agencies as a result of the abolition of with-

holding tax and other regulatory changes last year. The choice of a yen issue also highlights the growing liberalisation of Japanese financial markets promised as a result of bilateral talks between Japan and the U.S. last summer.

Led by IBI International and Merrill Lynch, the seven-year bond bears interest at 6 1/2 per cent with an issue price of 99 1/2. Proceeds are to be swapped into U.S. currency by the borrower.

One problem with the issue that emerged on Friday, however, was that Swiss investors, who in other circumstances would be natural buyers of European paper, tended to shun the deal. Many do not like the specially targeted format because they fear it could leave a future

loophole for the U.S. authorities to try to force banks to disclose the identity of beneficial owners of the paper. That would be a contravention of Swiss banking secrecy.

Though the paper found ready buyers elsewhere in Europe, that meant that its initial performance was not quite as sparkling as the prestige name of the borrower might suggest. Some bankers said they detected lead manager support for the bonds at a discount of around 1 1/2 per cent, just within its total fees of 1 1/2 per cent. By Friday evening, according to IBI International, the discount had, however, narrowed slightly to 1 1/4 per cent.

Whatever the views of Swiss investors, bankers say that the Sallie Mae bond will add some much

needed variety and quality to the list of available Euroyen issues and may inject some life into a market that has turned rather dull after a rush of new issues in early December. More new bonds are expected shortly, including one this week from Electricité de France.

Elsewhere, the international bond markets generally started 1985 in a very cautious mood, with prices marked down for much of the week on the back of a poor performance in the New York bond market. Only towards the weekend was there any sign of a recovery that could put the market in a better mood to absorb a resumption of new issuing activity expected in many sectors this week.

West German bankers have, for

example, scheduled no less than five issues totalling DM 850m this week, starting with a DM 300m issue for Finland today. As in the dollar sector bankers warn that these issues will have to be very carefully priced to ensure a good reception in what remains a slightly nervous market. Besides the expected volume of new issues two main factors are still a source of concern - the strength of the dollar and fears of higher interest rates in the U.S.

There were no fixed-rate issues at all in the Eurodollar sector last week, but both Banco de Bilbao and the quasi governmental Finnish Paper Mills Association braved the floating rate note sector with bonds of \$100m apiece.

### CURRENT INTERNATIONAL BOND ISSUES

Borrower	Amount \$m	Maturity	Av. life years	Coupon %	Price	Lead Manager	Offer yield %
U.S. DOLLARS							
Banco Int. Ltd. (a)†	100	2000	15	7 1/2	100	Wm. Gurney, Banco de Bilbao	-
Finland Paper Mills (a)†	100	1995	10	7 1/2	100	Kansallis-Osake-Pankki, Wm. Gurney	-
SWISS FRANCES							
Yokohama S.S. **	30	1989	-	(2 1/4)	100	IBI	-
Yokohama S.S. **	50	1990	-	2 1/4	100	Swiss Volksbank	-
Morgan Kaufmannbank ***	45	1987	-	4 1/4	100	Bnp Gutzwiller, K.B.	4.750
ECU							
BCE†	75	1992	7	9 1/4	100	Dr. Lyonnais, BBL	9.750
BCE†	50	1985	10	9 1/4	100		9.875
GUILLERMS							
LADE	200	1995	8	7 1/4	-	ABN, Amfio	-
LUXEMBOURG FRANCES							
City of Stockholm ***	250	1990	5	10 1/4	100	Bnp Int. & Leont., Svenska Handelsbanken	10.250
YEN							
Sallie Mae †	25bn	1992	7	6 1/2	99 1/2	IBI Int., Merrill Lynch	6.871

\* Not yet priced. † Fixed terms. \*\* Private Placement. ‡ Convertible. † Floating rate note. ‡ With debt warrants. † With equity warrants. (a) 1/2 over 3-m Libor first 5 index, then 7/8 over 6-m Libor. (b) 1/2 over 6-m Libor. Note: Yields are calculated on ABX basis.

All these Bonds having been sold, this announcement appears as a matter of record only.

New Issue

December 1984



## GÉNÉRALE OCCIDENTALE

Paris, France

Swiss Francs 80 000 000

4 1/2% Convertible Bonds 1984-1994

SODITIC S.A.

Amro Bank und Finanz  
Bank Heusser & Cie AG  
Bank Künzler AG  
Bank of Tokyo (Schweiz) AG  
Banque Bruxelles Lambert (Suisse) S.A.  
Banque Gutzwiller, Kurz, Bungere S.A.  
Banque Keyser Ullmann S.A.  
Banque de Participations et de Placements S.A.  
Banque Scandinave en Suisse  
BHF Bank (Schweiz) AG  
Citicorp Bank (Schweiz) AG  
Crédit des Bergues  
Dai-ichi Kangyo Bank (Schweiz) AG  
First Chicago S.A.  
Grindlays Bank Plc  
Höfninger & Cie  
Kreditbank (Suisse) S.A.  
New Japan Securities (Schweiz) AG  
Nordfinanz-Bank Zürich  
Samuel Montagu (Suisse) S.A.  
Société Générale Alsacienne de Banque  
- Groupe Société Générale -

Banco Exterior (Suiza) S.A.  
Bank für Kredit und Aussenhandel AG  
Bank Oppenheim Pierson (Schweiz) AG  
Bankers Trust AG  
Banque de Dépôts et de Gestion  
Banque Indosuez, Succursales de Suisse  
Banque Kleinwort Benson S.A.  
Banque Pasche S.A.  
Barclays Bank (Suisse) S.A.  
Chemical New York Finance (Suisse) S.A.  
Compagnie de Banque et d'Investissements, CBI  
Crédit Lyonnais Finanz AG Zürich  
Daiwa (Schweiz) S.A.  
Great Pacific Capital S.A.  
Handelsfinanz Midland Bank  
The Industrial Bank of Japan (Schweiz) AG  
Lloyds Bank International Ltd.  
Nippon Kangyo Kakumaru (Suisse) S.A.  
The Royal Bank of Canada (Suisse)  
J. Henry Schroder Bank AG  
Sumitomo International Finance AG  
Sumitomo Trust Finance (Schweiz) Ltd.

## Texas Eastern Corporation

U.S. \$200,000,000  
Euronote Issuance Facility

Arranger

Swiss Bank Corporation International Limited

Underwriters

Algemene Bank Nederland N.V.  
Banque Nationale de Paris  
Den norske Creditbank  
IBJ International Limited  
The Royal Bank of Canada (Overseas) N.V.  
Union Bank of Switzerland  
Saudi International Bank  
(Al-Bank Al-Saudi Al-Ahram Limited)

Bank of Tokyo International Limited  
Credit Lyonnais  
Deutsche Bank Aktiengesellschaft  
International Westminster Bank PLC  
Swiss Bank Corporation  
Bergen Bank A/S

Tender Panel

Bank of America Capital Markets Group  
Bankers Trust International Limited  
CIBC Limited  
Citicorp Capital Markets Group  
Credit Suisse First Boston Limited  
Fuji International Finance Limited  
Manufacturers Hanover Limited  
Morgan Guaranty Ltd  
Sanwa International Limited  
Toronto Dominion International Limited  
Bank of Montreal  
Chase Manhattan Capital Markets Group  
Chemical Bank International Group  
County Bank Limited  
Deutsche Bank Aktiengesellschaft  
Goldman Sachs International Corp.  
Merrill Lynch Capital Markets  
Orion Royal Bank Limited  
Salomon Brothers International Limited  
Swiss Bank Corporation International Limited  
Union Bank of Switzerland (Securities) Limited  
Westpac Banking Corporation

Facility Agent

International Westminster Bank PLC

Tender Agent

Swiss Bank Corporation International Limited

This announcement appears as a matter of record only

December 1984



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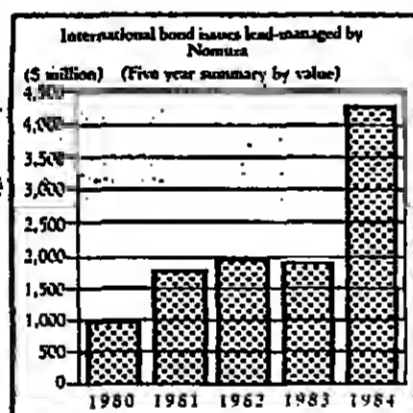
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In 1984, Nomura lead-managed 48 international public offerings totalling almost \$4.5bn.

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NEW ISSUE 5th December, 1984

**DOW**

**THE DOW CHEMICAL COMPANY**  
(Incorporated under the laws of the State of Delaware, U.S.A.)

**Japanese Yen 50,000,000,000**  
**7 per cent. Bonds 1994**  
Issue Price 100 per cent.

Nomura International Limited  
Deutsche Bank Aktiengesellschaft  
European Banking Company Limited  
Salomon Brothers International Limited  
Smith Barney, Harris Upham & Co. Incorporated

Amro International Limited  
Banque Paribas de Paris  
Crédit Lyonnais  
Creditanstalt Bankverein  
Daiva Bank (Capital Management) Limited  
Goldman Sachs International Corp.  
Merrill Lynch Capital Markets  
The Nikko Securities Co., (Europe) Ltd.  
Société Générale  
Swiss Bank Corporation International Limited  
Yamaichi International (Europe) Limited

Bank of Tokyo International Limited  
County Bank Limited  
Credit Suisse First Boston Limited  
Dai-ichi Kangyo International Limited  
Daiva Europe Limited  
IBJ International Limited  
Mitsui Trust Bank (Europe) S.A.  
Orion Royal Bank Limited  
Société Générale de Banque S.A.  
Union Bank of Switzerland (Securities) Limited  
Yamaichi International (Europe) Limited

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NEW ISSUE 11th December, 1984

**TRW Inc.**  
(Incorporated with limited liability in the State of Ohio, U.S.A.)

**¥15,000,000,000**  
**7 per cent. Bonds due 11th December, 1994**  
Issue price 100 per cent.

Morgan Guaranty Ltd  
Nomura International Limited  
Smith Barney, Harris Upham & Co. Incorporated  
Sumitomo Finance International

Algemeene Bank Nederland N.V.  
Banque Paribas de Paris  
Commerzbank Aktiengesellschaft  
Crédit Lyonnais  
Daiva Europe Limited  
Goldman Sachs International Corp.  
Mitsui Finance International Limited  
The Nikko Securities Co., (Europe) Ltd.  
Salomon Brothers International Limited  
Sumitomo Trust International Limited  
The Tokyo-Mitsubishi Bank (Europe) S.A.  
Union Bank of Switzerland (Securities) Limited  
Yamaichi International (Europe) Limited

Bank of Tokyo International Limited  
Barclays Bank Group  
Crédit Commercial de France  
Crédit Suisse First Boston Limited  
Dresdner Bank Aktiengesellschaft  
IBJ International Limited  
Morgan Stanley International  
N. M. Rothschild & Sons Limited  
Sawara International Limited  
Swiss Bank Corporation International Limited  
Toyo Trust International Limited  
S. G. Warburg & Co. Ltd.

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NEW ISSUE 18th December, 1984

**ALLIED**

**ALLIED CORPORATION**  
(Incorporated with limited liability in the State of New York, U.S.A.)

**Japanese Yen 10,000,000,000**  
**6% Bonds Due December 1, 1991**  
Issue price 100 per cent.

Nomura International Limited  
Credit Suisse First Boston Limited  
Salomon Brothers International Limited

Algemeene Bank Nederland N.V.  
Banque Paribas de Paris  
Deutsche Bank Aktiengesellschaft  
IBJ International Limited  
Morgan Guaranty Ltd  
Orion Royal Bank Limited  
Sumitomo Finance International  
Union Bank of Switzerland (Securities) Limited

Bank of Tokyo International Limited  
Daiva Europe Limited  
Dresdner Bank Aktiengesellschaft  
ITCS International Limited  
The Nikko Securities Co., (Europe) Ltd.  
Société Générale  
Swiss Bank Corporation International Limited  
Yamaichi International (Europe) Limited

These securities have been sold outside the United States of America and Japan. This announcement appears as a matter of record only.

NEW ISSUE 28th November, 1984

**New Zealand**

**¥100,000,000,000**  
**Seventh Series Japanese Yen Bonds (1984)**  
**7.1% Bonds Due 1994**

The Nomura Securities Co., Ltd.  
Yamaichi Securities Company, Ltd.  
Daiva Securities Co. Ltd.  
The Nikko Securities Co., Ltd.  
New Japan Securities Co., Ltd.

Samurai bond issues lead-managed by Nomura (second half of 1984)

Issue Date	No.	Amount (¥ bn)	Maturity (years)
Jul. 25	No. 6	30	10
Jul. 27	No. 4	30	10
Aug. 15	No. 5	30	10
Oct. 26	No. 1	25	10
Oct. 31	No. 9	50	12
Nov. 13	No. 1	20	10
Nov. 14	No. 2	30	10
Nov. 30	No. 7	100	10
Dec. 6	No. 29	50	15
Dec. 20	No. 1	30	10
Total		595	

(Approx. U.S.\$1.6 bn equivalent)

Euroyen bond issues lead-managed by Nomura since the liberalisation of that market in December 1984

Signing Date	Amount (¥ bn)	Maturity (years)
Dec. 1	50	10
Dec. 3	15	10
Dec. 7	10	7
Dec. 17	25	7
Dec. 21	20	7
Total	120	

(Approx. U.S.\$466m equivalent)

Euroyen Certificates of Deposit

Nomura acted, or will act, as underwriters and major market-maker for the following issues

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## INTERNATIONAL CAPITAL MARKETS AND COMPANIES

## CORPORATE FINANCE

## London keen to soothe 'Yellow Book' fears

A MERCHANT BANKER'S nightmare: your client, an aggressor in a takeover battle, raises its bid so that, if successful, it could have to issue shares totalling over 10 per cent of existing equity. But an issue of this size requires publication of lengthy Listing Particulars (the equivalent of a prospectus), and your client loses the edge in its fight because of the time taken—and has meanwhile clocked up additional underwriting fees.

This is an example of the worst fears of City practitioners about the consequences of the London Stock Exchange's new listing rules, enshrined in the "Yellow Book," which took effect last week.

The book incorporates standards set by the European Commission and gives the Exchange statutory powers which will of necessity make its Quotations Department much less flexible—and many believe slower—in dealing with companies issuing securities and their City sponsors.

For new issuers, the changes will make little difference to an already rigorous procedure.

Still, companies will now have to spend more money and time preparing the detailed documents, and more often. Documents require the Exchange's imprimatur in their final form, and drafts must even carry margin notes indicating which paragraph of the 316-page Book is being complied with. There are also fuller disclosure requirements after listing.

In the lull after the end-of-1984 stampede for listings, especially by American companies, all parties—including the Stock Exchange—are feeling their way through the new rules.

It is already clear, however, that the Quotations Department is adopting a practical approach which will keep bureaucracy to what it hopes will be the minimum level possible.

Over the past six months, staff involved in reading submitted documents have been expanded by a third, to about 20, and the department is prepared to recruit more if necessary.

Because of the Exchange's

practical approach, the had dream eluded above could turn out happily enough with a bidding company allowed to publish Listing Particulars after the formal offer document, especially when a delay would incur extra underwriting costs. Provided the Particulars are published before listing, they may even be sent out after the 60-day takeover clock has stopped.

The implementation of these procedures, like many parts of the Yellow Book, raises issues which will have to be tested case-by-case. Ladbroke Group, bidding for Comfort Hotels, issued 36-page Particulars but kept the offer document, sent out simultaneously, down to 16 pages because the former contained much data that would previously have been included in the latter.

If Particulars were published separately, however, the Takeover Code would require more information in the offer document, so there would be costly duplication. And what if an offeree shareholder, having irrevocably accepted a bid, was dismayed on seeing something

in the Particulars and wanted to withdraw the acceptance after the 60-day deadline? Clearly, takeovers could become even more nail-biting and sleepless affairs.

Not surprisingly, the Exchange is anxious that such fears should not get out of control. Nevertheless, it is naturally conscious of its enhanced responsibilities and of the overriding need to treat all customers equally. Greater disclosure will be required of issuing companies, especially in submitting documents on time, and the Exchange's ability to grant waivers will be very limited.

Some of the new disclosure rules—concerning, for example, details of important investments, licences, associate companies, directors' other interests—are open to interpretation and will no doubt be hotly disputed by individual issuers. Some, such as directors' fraud convictions and more specific information about current trading, can only be seen as sensible additions to investors' knowledge. Others, such as details of employee share

schemes, just appear to take up time and space.

Most of the requirements add little to the sum of information available about a company, but simply force the company to put it all together each time it issues a significant batch of securities, including debits, instead of only at its original listing.

Many expansion-minded companies will probably begin to keep up-to-date Listing Particulars stored in word processors, ready for use at any time. But the loss of flexibility will still have some effects. Large vendor placings, an increasingly popular method of funding acquisitions, will lose some of the speed and simplicity which have made them attractive.

And there will be positive features, however small. Application forms for shares may now be issued separately from the full prospectus, so the streets of the Square Mile will no longer be littered with prospectuses which have had the back page torn off.

Alexander Nicoll

## U.S. energy majors in merger discussions

By Paul Taylor in New York

OCCIDENTAL PETROLEUM, the tenth largest U.S. oil company, and Diamond Shamrock, another major U.S. energy group with substantial oil and gas holdings, have confirmed that they are "engaged in discussions looking towards a possible business combination."

The two companies said their boards would meet today and added that a further announcement would be made after the meeting.

Trading in the two companies' shares was suspended early on Friday at their request. After trading was resumed, Diamond Shamrock's shares jumped in heavy trading to close up \$3.25 at \$21 a share amid speculation that Occidental might pay up to \$25 a share or a total of about \$3.3bn to acquire Diamond Shamrock.

Wall Street analysts suggested that any deal would probably be based on a stock swap—perhaps on a one-for-one basis. Occidental's shares closed \$1.75 lower on Friday at \$25 a share.

An agreement between the two companies would mark a continuation of the recent wave of mergers and takeovers in the U.S. oil industry. A merger between Occidental with 1983 sales of \$18bn and Diamond Shamrock, with \$4bn in sales, would create the eighth largest oil company in the U.S.

It would also mark a change in direction for Occidental, which only two years ago paid \$4bn for Cities Service, but has subsequently been aggressively selling Cities Service assets in a bid to lower its heavy debt burden. This has been cut from \$6.3bn at the end of 1983 to \$3.6bn at the end of the third quarter of last year.

First City Properties, the California property group controlled by the Canadian Belzberg family, appears close to winning its takeover bid for Seavill, a consumer products group, after sweetening its three-week-old offer from \$35 a share or \$430m to \$42.50 a share or \$515m.

Mr William Andrews, Seavill's chairman and chief executive, is supporting the higher offer.

## INTERNATIONAL APPOINTMENTS

## New chief sought for Arbed Saarstahl

BY PETER BRUCE IN BONN

ARBED SAARSTAHL, the long-sick West German steel-maker — the country's highest single recipient of state aid ever — has been plunged into a new crisis in the opening days of 1985. The company currently has no chief executive, following the failure of its supervisory board to find a successor to Herr Jürgen Krakow, 62, who retired at the end of December.

Dr Wolfgang Bernhardt, who used to run the now-failed Korf Stahl group, was expected formally to be installed in the post last Wednesday after months of negotiations with the Saarstahl supervisory board. But the board, which met in Düsseldorf on Wednesday had to announce he had withdrawn.

The former Korf executive's negotiations had been conducted, it appears, with a small elite within the supervisory board, Dr Emmanuel Tesch, president of Luxembourg's Arbed, which is still nominally Saarstahl's parent. Herr Rudolf Judith, an IG Metall union representative, and Herr Günther Vogelsang, a Saarstahl consultant.

Dr Tesch said later he had no idea why Dr Bernhardt had refused to take up the post. He indicated that the trio had already drawn up a list of other strong candidates and that the problem could be quickly resolved.

Dr Bernhardt, however, has

made it clear he felt the contract he was finally offered was too restrictive, and would have meant him having to consult with the supervisory board on most major decisions. "For my part, I am always prepared to deal with details," he said, "but I also need a free hand."

The supervisors face similar problems in trying to persuade anyone else to run the company. More than DM 3bn (around \$1bn) has already been sunk into the company by the State; there is little hope of returning to profitability despite an improved turnover forecast for this year; Bonn insists it will stick to a European Economic Community decision to cut off all steel aid at the end of the year; and possible job losses at Saarstahl are bound to play an important role in state elections in Saarland in May. Managing the company has become exceedingly complex and political.

Saarstahl lost DM 123m (about \$40m) in 1983, a marginal improvement on 1982, and is expected to turn in further losses for 1984. So critical have the steelmakers' operational difficulties become that only days after winning European Commission approval for a life-saving injection of DM 77m in November, it was back in Brussels seeking permission for further subsidy payments worth a minimum DM 268m to be made this year.

## Pistner takes top post at Rapid-American offshoot

BY TERRY BYLAND IN NEW YORK

RAPID-AMERICAN has confirmed that Mr Stephen L. Pistner, who last week resigned as chief executive of Montgomery Ward, the Chicago retailer is taking over as chairman and chief executive of the retail subsidiary of Rapid. He also becomes senior vice-president and a corporate director of Rapid-American.

Mr Pistner, 52, is believed to be receiving a remuneration package of around \$3m including some equity in Rapid-American. He describes his new appointment as an exciting opportunity and says he has

been mandated to generate a new strategic plan for McCrory, where profits dropped by 45 per cent to \$13.8m in the first nine months of this year on sales 6 per cent higher at \$1.1bn.

At Montgomery Ward, a subsidiary of Mobil, the U.S. oil major, Mr Pistner was regarded as an abrasive executive whose reign was punctuated by the departures of other senior management members.

Mr Meshulam Riklis, chairman and chief executive of Rapid-American, is known as an aggressive, expansion-minded entrepreneur.

## Denmark in DKr 25m move to help Flexplan

BY MILVY BARNES IN COPENHAGEN

MR IB STETTER, Denmark's Industry Minister, has agreed to allow Flexplan, a civil engineering and construction company, to retrieve DKr 25m (\$19m) from a deposit made against an export credit guarantee.

The decision will help to ease the problems of Kronenbanken, the country's seventh largest commercial bank, which had to be rescued last month with guarantees from the central bank and the three biggest Copenhagen banks. The Bank Inspectorate found that a substantial part of the bank's equity capital had to be regarded as lost following problems over a guarantee by the bank on a DKr 750m hospital construction contract in Nigeria being undertaken by Flexplan.

Kronenbanken provided guarantees worth DKr 650m to Flexplan, most of which is backed by guarantees from the government's export credit council to cover the Nigerian project, where Flexplan is building five small hospitals and making extensions to another three.

Flexplan was asked to put up DKr 75m in deposits when it obtained the export credit guarantees. It is DKr 25m of this money which was released to the company to save it from suspending payments to creditors.

As part of the deal negotiated with the minister, Kronenbanken agreed to convert DKr 190m of outstanding loans to the company to subordinated loan capital.

## Heineken buys Quilmes stake

HEINEKEN, the Dutch brewing multinational, is to acquire a 15 per cent stake in Quilmes, the South American brewery group, for about \$10m, writes Laura Rann in Amsterdam.

Quilmes is involved in brewing, malting and soft drinks making in Argentina, Uruguay and Paraguay, with beer sales amounting to 4m hectolitres in these countries.

## Exxon's Dutch unit acquired by Kemira

By Lance Keyworth in Helsinki

KEMIRA, the Finnish state-owned chemicals group, has bought Esso Chemie, Exxon's Dutch subsidiary, for approximately Fm 500m (\$75m). The deal will be financed partly from Kemira's own capital and partly from foreign loans.

The plants at Rozenburg, near Rotterdam, include a natural gas-based ammonia plant with a production capacity of 530,000 tonnes a year, most of which is processed into fertiliser. The surplus of about 150,000 tonnes will be shipped to Finland, which currently has to import about 80 per cent of its ammonia requirements.

Mr Yrjö Pessi, president of Kemira, says that the takeover from Exxon was "the most recent step in the international expansion of Kemira group which acquired the UK-based L and K Fertilisers and the paint manufacturers Donald Macpherson Group in 1982 and 1984."

Kemira's consolidated turnover in 1984 was about \$350m. Net sales of Esso Chemie in the same year were around \$116m.

## France assures Technip of further state aid

BY DAVID HOUSEGO IN PARIS

TECHNIP, the ailing French engineering group, has received assurances of further state aid that should safeguard its future. Although the amounts involved have not been announced, government officials said on Friday that it would be substantially in excess of FFr 200m (\$20.6m).

The French government is apparently anxious that Technip, which obtains some 80 per cent of its earnings from exports, should not suffer (as did Creuset-Loire, the now liquidated engineering group), in competition for projects abroad by fears about its financial future.

The government and the state-controlled oil groups Elf Aquitaine and Compagnie Française des Pétroles are among Technip's major shareholders. All are expected to contribute to capital increases in the spring to cover losses and ensure future viability.

Elf, which has increased its stake in Technip from 24.5 per cent to 33.3 per cent, and other Technip shareholders recently contributed to a FFr 300m

capital increase for Technip. Government officials said that the fresh cash injection—which could take place in two slices—would be substantially larger than this.

Technip, which made consolidated losses of FFr 224m in 1983, expects its operating losses for last year to be around FFr 250m. The consolidated deficit will have been further swollen last year, however, by losses incurred by Creuset-Loire Entreprises, its civil engineering subsidiary and by provisions on export contracts in the Middle East and developing countries.

At the same time as pumping fresh cash into the group, the government has approved restructuring plans that involve between 300-340 redundancies. This is less than the 435 redundancies sought in the summer and postponed due to union pressure. The redundancies form part of a 760 reduction in the 2,753 workforce with the rest coming from voluntary departures, early retirement, retraining and job conversion schemes.

All these Notes having been sold, this announcement appears as a matter of record only.



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£100,000,000

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November 28, 1984

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December 1984

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December 1984



## FINANCIAL TIMES SURVEY

Monday January 7, 1985

## Standby Power

The need for standby power has increased with the much greater reliance on computer-run business transactions. Industry and the public sector also have a substantial demand. Technical developments are making the sets increasingly sophisticated

## Back in the limelight

AFTER SEVERAL years when the subject hardly needed to be thought about, power supply has of necessity become a talking point in Britain's boardrooms over the past few months.

Though the miners' strike this time has not led to power cuts, as in 1974, the mere possibility has been forcing companies to look at their standby power provision.

And, compared with ten years ago, the need for such provision has dramatically increased, as more and more operations within business have come to depend on computer transactions.

All this is good news, potentially at least, for one recently relatively hard-pressed sector of industry, the manufacturers of generator sets—the main equipment used to provide standby power.

In the UK market substantial over-capacity currently exists and in export markets demand for generator sets has in many cases reached a plateau. At the same time, competition has become ever more fierce. On the back of the 1970s boom in home and export sales the number of companies manufacturing generator sets rose dramatically, with a total of 125 companies entering the market between 1973 and 1978 alone.

In the domestic market the main growth has been in the public sector. The Property Services Agency is probably the largest purchaser, with the Department of the Environ-

## Survey by Alastair Guild

ment, Ministry of Defence, water boards and electricity boards following fairly close behind.

In the private sector, which accounts for roughly half of total sales, demand has been tapering off, according to Mr Iain Dale, chairman of the Association of British Generating Set Manufacturers (ABGSM). Growth is continuing, however, in sales to service industries, such as retailing and hotels, and to the financial services sector including banks.

## Policies

Replacement business offers relatively few opportunities, because they are called on so infrequently, standby generator sets purchased in the 1970s should last at least into the 1990s.

Some of the larger companies complain, too, that the public sector should be doing more through its purchasing policies to support them, thereby helping to improve their competitiveness in overseas markets. The quality control standards set down in the government's procurement initiative are met by the bigger companies, it is argued, but not always by many

of the new entrants into the market.

These companies may be gaining business in the public sector, so reducing the profitability of the well-established manufacturers, which then have fewer resources to devote to their export marketing effort. The public sector should insist on companies meeting such quality control standards, says Mr Ian Landgrebe, secretary of the NEDO generating set sub-committee.

The world recession and the protectionist policies adopted by many countries, which, until recently, were major importers of British generator sets, have added to the difficulties. Indonesia, for example, has put up barriers to imports of certain ranges of diesel sets, to protect what it claims is its indigenous production capability.

It is now the largest market for Japanese generator set exports, average unit weight 240 kg or above. In 1983, Indonesia imported £13.90m worth of sets from Japan, though analysts suggest that these will be mainly petrol-powered, rather than diesel-powered sets.

Yet, although market conditions overseas have been difficult, UK manufacturers have had notable successes. The UK has taken over from the U.S. as the top exporter of generator sets. The industry also expects that as countries develop their own grid system, so the market for standby sets will grow. This is already happening in Egypt, Turkey and Libya, where standby is installed in public buildings such as hospitals and banks.

The technical demands from areas such as the Middle East are steadily increasing too, and the independence of the UK generator set industry from engine manufacturers does

give it a flexibility of configuration which is lacking in many competitors, Mr Dale argues.

In America, by contrast, sets tend to be assembled by a company in the same group as a large engine manufacturer. The UK industry tends, instead, to identify the needs of the customer, based on the application, and to pick and choose the components of a set, not necessarily on cost alone, but also on technical grounds.

Though UK generator set manufacturers do import foreign engines, the expected influx of Japanese engines, feared two years ago, has also largely been averted.

Japanese engines sell well nonetheless in south east Asia and the Middle East and a number of larger UK companies have decided that to compete effectively in such markets, they must manufacture from overseas bases. Petrow, for example, sells from Singapore, and Dale from Mexico and Thailand.

Several companies have also set up offices to fill the gaps

left in distributor networks when the 1970s boom ended. Dale's Spanish-speaking office in Florida, for example, will service and develop the South American market.

A further indication of the increasingly international nature of the generating set industry is the standards now being developed by a working group set up by the International Standards Organisation in 1982. A draft international standard for reciprocating internal combustion engine driven generating sets will be circulated in May this year. It will lay down standards for the application, rating, performance, controls, switch gear panels and testing of diesel

generators. Various national and international standards exist for engines and for alternators but not for the two together, Mr Bob Wheldon, convenor of the working group points out.

In the UK itself some rationalisation of the industry is regarded by leading manu-



Two Petrow 500kw generators which supply continuous power to a Middle East cement factory

facturers as long overdue. "We thought economic factors would bring it about, but companies have just gone from a small factory back into a garage in many cases. They have subcontracted much more and laid people off but they still exist. They fight on very tight margins and that makes it a difficult industry to be in, at present," Mr Dale observes.

Among the pressures now facing the smaller companies, however, is the increasing demand from customers for a more sophisticated product. The mix between specialist and standard sets has moved from 60 per cent standard and 40 per cent special in the 1970s to 40:60 now, with the trend towards more specialised units particularly apparent among buyers in the services sector.

Some new business is also being created as a result of the Government's scrapping of the Central Electricity Generating Board's monopoly on electricity supply. The 1983 Energy Act allows business to generate their own electricity.

Among generating set manufacturers Dale Electric has already carried out a number of schemes for hotels, enabling them to become self-sufficient in electricity, with the equipment in many cases being extended into a combined heat and power (CHP) system, making use of surplus heat from the generator.

The efficiency of a normal generator set in converting the

energy in diesel oil into usable energy is about 40 per cent. If it is combined with a CHP system this can double to about 80 per cent and the mains can become simply the top-up.

At the larger end of the market where sales of gas turbines as standby, or for peak loading, have generally been static, manufacturers have also been looking at the possibilities offered by systems such as CHP. Waste gases from refining or petrochemical processes can, for example, be used as fuel for turbines.

## Merge

Earlier this year, GEC and Rolls-Royce merged their gas turbine generating set interests, making GEC Rolls-Royce (Power Generation) the world's main supplier of rapid-start sets. Gas-derivative gas turbines—effectively industrialised jet engines—can provide up to 60,000 kw of power in under three minutes.

Mr Mervyn Leah, the new company's marketing manager, says the U.S. will continue to be the largest market, with the offshore market also growing.

"I can foresee an increasing interest in gas turbines for standby as some of the units installed during the late 1960s, early 1970s get heavy on maintenance. These units had quite antiquated control systems. The thermal cycling involved is quite severe though the number of hours it may be used may

not be that great."

Lower down the scale, batteries now play an increasingly important role in the protection of telecommunications, computers and computer networks and processing control equipment from interruptions or fluctuations in the mains supply. The major technical development has been gas recombination technology to give "sealed, maintenance-free" lead acid batteries.

The world market for lead acid batteries as standby for "information technology" applications, including uninterruptible power supply (UPS) systems is estimated at over \$125m. Telecommunications is the second largest market (\$70m), then power generation/distribution (\$55m), and emergency lighting and railways, both about \$30m.

Nickel cadmium continues to be the main alternative to lead acid batteries. Sealed nickel cadmium batteries are available, but the range stops at 30 ampere/hour. Nickel cadmium batteries are more expensive to make, but are better able to withstand abuse.

They have traditionally been a more rugged product which costs up to two and a half times more than a lead acid battery with the same capacity. As such, they are used extensively in the Middle East where there are extremes of climate and maintenance may not be very good. In western Europe, they have about a quarter of the standby market.

## Generating set exports compared

	1979	1980	1981	1982	1983
U.S.	149.8	149.7	253.2	246.2	131.0
Japan*	79.0	112.5	181.6	220.4	282.2
UK	101.6	101.1	153.5	148.3	156.3
West Germany	81.8	87.6	117.1	142.7	125.0
France	39.2	42.4	55.2	65.9	66.8
Italy	38.9	25.3	38.0	40.3	82.3
TOTAL	504.3	518.6	796.8	863.8	792.6
UK % of total	20.3	19.5	19.2	17.2	19.7
Export growth rates %	-24.4	+ 3.7	+54.0	+ 8.2	- 8.1
UK	-29.9	- 0.5	+51.5	- 2.4	+ 5.4

\* Includes petrol powered sets.  
Source: Association of British Generating Set Manufacturers.

# REMEMBER.

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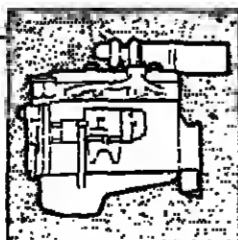
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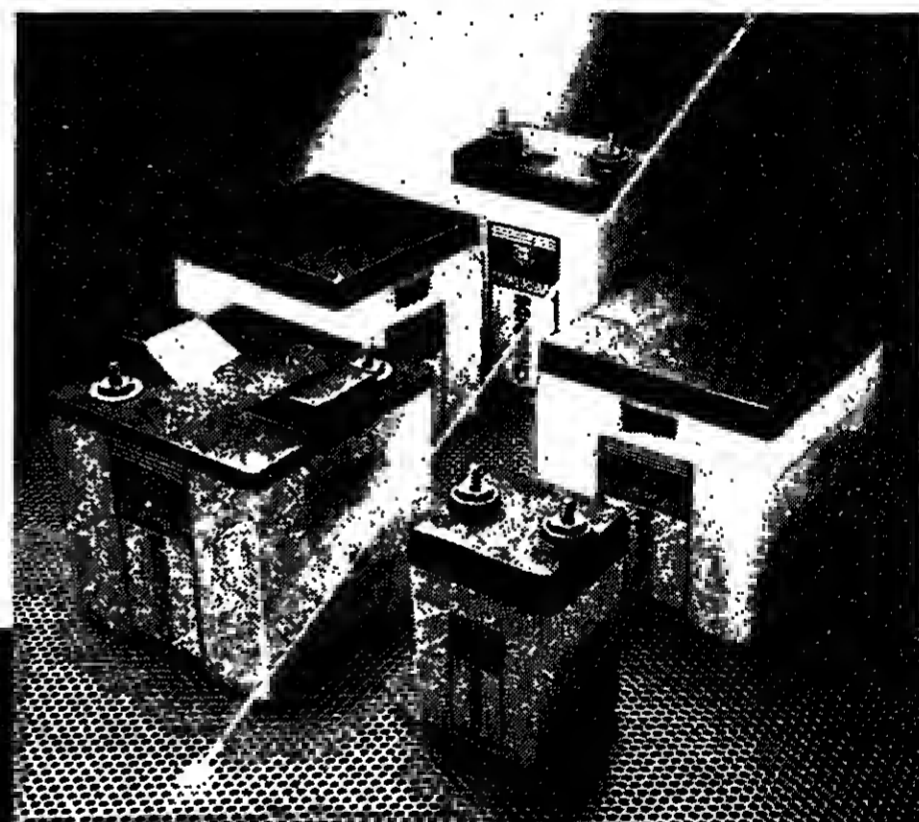
efficiency. Each achieves exceptionally low noise and smoke emission levels. All have legendary Volvo reliability.

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## Standby Power 2

Telecommunications, hazardous processes, data transmissions and computers  
all need continuous electricity

## How standby systems operate

MORE THAN 10,000 breaks a year occur in the UK's mains power supply, not counting cuts due to industrial action. Though they tend to be relatively short interruptions, they can be just as critical as prolonged breaks.

Many users of electricity demand absolute continuity—a failure for as long as the blink of an eye could be disastrous. Other users can tolerate very short breaks of a fraction of a second and most can tolerate breaks of only a few seconds.

The need for a continuous supply of electricity, in varying degrees, ranges from the control of hazardous processes and instrumentation and control in oil refineries, to data transmission systems, telecommunications, broadcasting and on-line computers.

Transport is another area where high-integrity loads are required, for instance, of

lighting and ventilation of long tunnels, radar, air and land transport control systems and airport landing approach systems. In hospitals, lives literally depend on a constant electricity supply.

A no-break, or uninterruptible power supply (UPS), system stores energy to bridge the gap between failure of the public supply and the availability of an engine-driven generator which normally requires some 10 seconds to supply the load. UPS systems also continuously condition the AC supply from the mains or generator, making sure it meets the load's voltage and frequency requirements.

Energy storage is provided either by a rotating flywheel or a large rechargeable battery. The choice of system will depend on technical and commercial considerations. With either system, a standby generator is required, of

larger capacity than the no-break plant.

A flywheel or battery is also used to store energy in a short-break system. A short break (not exceeding 1 second) occurs from the time when the public supply fails and the load is picked up by the short-break plant. The advantage of this system over no-break plant is purely cost but it is adequate for a number of purposes.

Multiple standby systems which use straightforward engine-driven standby generators involve a break in supply of 10 seconds or more while the generator revs up to full load. Most situations require generators to start, run and stop automatically should the public mains supply fail.

Automatic plant monitors the mains supply not only to see if it is present but also to check its quality. It is often fitted with a complete manual

override control system should the automatic facility fail. Manually controlled generators may then be used to supply the balance of standby power requirements for non-essential services.

In some circumstances, users prefer to supply the load by running the generators in parallel with further, normally stationary, reserve plant, using the public supply as a standby. They may do this during certain operational periods when a short-term loss of supply cannot be tolerated.

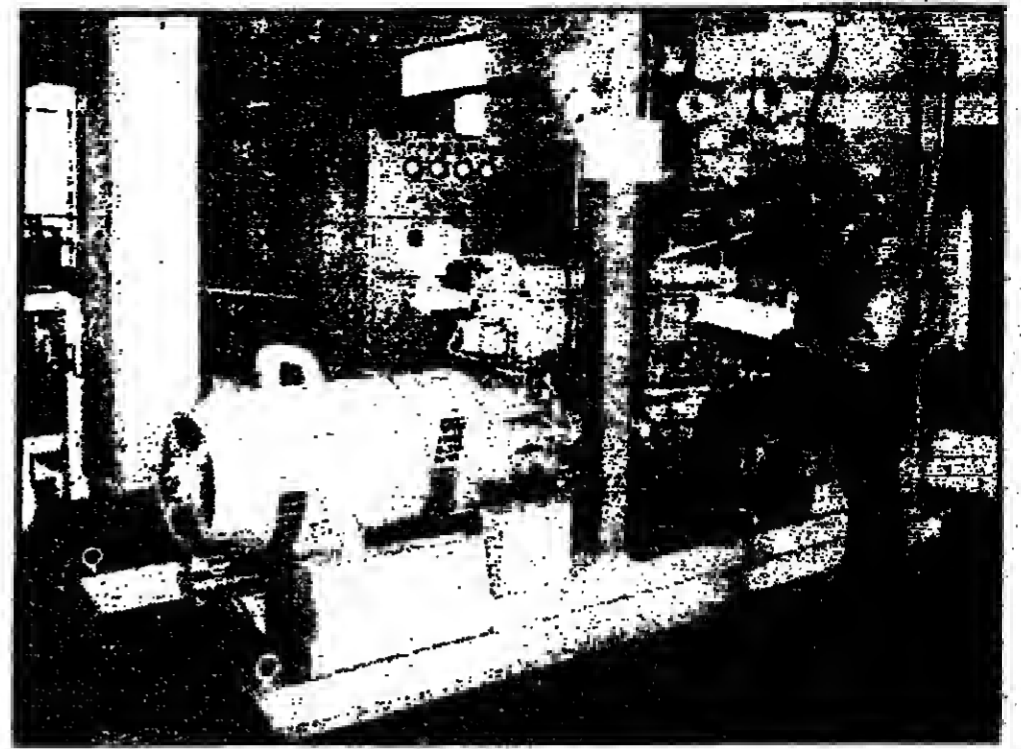
Mutual standby systems are usually used when no public supply is available, such as remote repeater stations or lighthouses. The installation consists of two or more engine-driven generators, one or more of which is supplying the load continuously.

A high proportion of diesel generating sets now have provision for parallel operation.

The incoming machine is synchronised and connected to those already running. The load is apportioned between the sets as the load varies.

Various types of control systems automatically monitor the service load, and start up and shut down sets as well as carry out synchronising and load sharing without the need for operator control. Such schemes are expensive, however, and not always justified; manually operated parallel running systems are still much more common.

The Association of British Generating Set Manufacturers (ABGSM) Code of Practice TMS gives guidance on this and other aspects of concern to designers, installers and users of generator sets. The association's nine members, though forming only eight per cent of the UK industry, account for 50 per cent of UK production.



A fully-automatic Hawker Siddeley standby set at a British Telecom installation

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Public sector work is providing much of the demand  
Generator sales rate slows

THE GENERATOR SET industry has to go back 10 years to find a growth market for standby sets. Then it was unusual to have a standby set on site but during the 1970s, both public and private sector organisations substantially increased their standby capacity.

In the public sector, for example, standby power requirements have been met by the end of the last decade. DHSS standards, for instance, stipulate that hospitals should themselves be able to meet two-thirds of their power requirements.

Now, the market for standby generator sets is largely provided by new works in the public sector and upgrading of existing standby facilities. In the private sector, the growth of the electronic office and the refurbishment of office buildings with air conditioning and computer suites has also given an impetus to generator set manufacturers.

Over the past 10 years, with modernisation the market for medium-sized standby sets has increased by a factor of three, according to some industry estimates due largely to an increase in load requirements. But the rate of increase in the last five years appears to have slowed.

"The way central government buys its standby plant has also had an impact on the industry," explained Mr Stephen Theunissen, managing director of Auto Diesels. "Three-year contracts cover a range of sets up to 500 kw. Special jobs above that come under tender. Above 500 kw, consultants set their own standards and specifications. With privatisation of consultancy, there is a tendency for uniformity to disappear."

Developments in micro-processor controls are making themselves felt in the generator set industry, as elsewhere.

"When selecting standby diesel generating systems of a high output—say one megawatt and



Total continuity of power supply is critical for emergency services such as fire stations, which have to maintain constant contact with communications centres. This system consists of a generating set and an uninterruptible power supply. If the mains supply fails or deteriorates, the UPS steps in and supplies power from its bank of Planté batteries for up to three minutes. At the same time, the diesel engine starts and the voltage and frequency of the standby set are up to normal values.

Even further reliability can be provided by adding a further generating set and extra controls. "UK diesel generator set manufacturers now see themselves increasingly as electrical engineers. Some manufacturers have been slow to react to these changes in the market and are still selling simple sets. By diversifying into electrical engineering, you can make money even in hard times," Mr Theunissen believes.

"The customer can now ask for anything he likes and find a manufacturer willing to make it."

Hawker-Siddeley Power Plant, which manufactures sets in the smaller end of the range, takes a slightly different approach. The bulk of its business is for sets rated 5-50 kVA, although its range does extend to 350 kVA units. Mr Alec Hurley, the company's international manager, says the UK private sector is very influential on the market for standby sets.

"In the past, when the worst has happened, we have not had enough stock so companies have had to go elsewhere to buy generators made in a backyard and sold as standby units. We are now building a range of standard items so we can draw from stock when demand is high."

Other manufacturers now devote virtually their entire production for the UK market to the electronics sector, providing standby for large computer or microprocessor-based applications. Auto Diesels' design and production techniques have been geared to that market. The company has been custom built to that market. The company has a capital expenditure programme of £220,000, £180,000 of that is computer-based, including £150,000 spent on CAD systems and a programmable sheet metal worker.

## Synchronise

One order for which Auto Diesels is using such techniques is a large project designed to protect the computer centre of an international bank from unreliable mains supply. A control suite has been custom built to that on mains failure, three 1,000 kVA generating sets will automatically synchronise and thereafter be capable of a combined output of up to 3 mVA.

Telecommunications is another example of where the generator set industry is responding to the need for applications-based systems. It is also a growth area both in the UK and overseas, with many such projects funded by aid agencies.

Micro-wave telecommunications systems use many repeater stations to join together long-distance communications links. Invariably, these systems cross over large sections of remote territory. Installation in such remote areas poses problems since the necessary equipment, together with all building and installation materials, has to be transported to sites over difficult terrain. Engineers then have to erect and commission the power plant in far from ideal conditions.

Some generator set manufacturers now offer complete factory-assembled and tested integrated power plant housed in containers. One example is Hawker Siddeley Power Plant's Telecompac, an integrated power source providing AC or DC/AC power, with dual diesel generating sets incorporating two units providing continuous power cycling over seven days.

Dawson Keith is an example of a manufacturer which has decided to concentrate its marketing effort on UK sales. The company exports some 50 per cent of its production, whereas the figure for companies such as Dale Electrics is between 70 and 80 per cent. T and R Generators and Newage Engineers export more than 90 per cent of their production.

"The home market is a very secure one," says Dawson Keith's sales director, Mr Bob Wheadon, "and we don't have any of the problems faced in the export business. The company is the sole supplier to the Department of the Environment / Property Services Agency of all generator sets above 100 kw, 20 per cent of its production."

## Signalling

Another 10 per cent of its production is used by manufacturers of UPS systems. Chloride Power Electronics, for example, recently placed a large order with Dawson Keith to supply its UPS systems being supplied to GPC Signals for railway signalling systems in the Middle East.

A further 10 per cent is going to replace existing UK standby plant. Mr Wheadon believes the UK market for diesel sets is almost wholly standby. Power requirements dictate that a set of say, 100 kVA installed 10 years ago be replaced by a 200 kVA set.

He believes that the importance of microprocessors for generators is overplayed. "Most standby is provided by a power unit. Sets running in parallel are more the exception than the rule. Some manufacturers are trying to sell sophisticated control systems overseas, for example. They have proved to be quite unreliable, and you cannot afford that in a standby system."

For large standby requirements, banks of small, microprocessor-controlled diesel units offer one solution. Gas turbines provide another alternative to the single larger diesel set, however. Mr Mervyn Leach of GEC Rolls-Royce (Power Generation) points out that gas turbines are not meant to compete against small individual diesel sets for standby applications.

GEC Rolls-Royce's range starts at 12 Mw and extends to 69.2 Mw. At the smaller end of the range, from start, either manual or automatic, to full load takes between two and three minutes.

"The customer likes to have the capability to manual start because he may want to use the set for peak topping, (cutting mains electricity requirement at peak times) for example. Gas turbines may also be controlled from a central plant control room. Where electric utilities have standby gas sets, they are operated from a regional grid control and may often be unmanned."

GEC Rolls-Royce and John Brown Engineering are the only two UK companies making gas turbines in this size range. Another GEC company, Ruston, makes gas turbines in the range below 10 Mw.

## Standby batteries compared

TELECOMMUNICATIONS				
50v nominal battery supplying 2kw for one hour to 48v at 25°C				
	Sealed lead/acid	Flat plate	Planté	
Volume	0.2	0.2	1.0	
Weight	0.3	0.7	1.0	
Cost	0.6	0.7	1.0	

COMPUTER STANDBY				
360v nominal battery supplying 90kw for 10 minutes to 324v at 25°C				
	Sealed lead/acid	Flat plate	Planté	
Volume	0.2	0.5	1.0	
Weight	0.3	0.7	1.0	
Cost	0.6	0.7	1.0	

ENGINE STARTING				
24v nominal battery supplying 700a for one minute to 12v at 25°C				
	Sealed lead/acid	Flat plate	Nickel cadmium	Planté
Volume	0.4	0.5	0.5	1.0
Weight	0.4	0.6	0.5	1.0
Cost	0.8	0.7	1.4	1.0

## World market for batteries still growing

THE WORLD market for standby power batteries is growing in real terms at a rate of between 4 and 6 per cent annually, according to UK and U.S. market research. The growth is based on the expansion of telecommunications networks, an increased demand for uninterruptible power supplies (UPS), and continued investment by public utilities.

Total production of all types of standby batteries in Western Europe in 1983 was approximately £250m by value with the UK accounting for 20 per cent. Further projections show continued modest growth for standby power batteries.

Lead acid batteries, in particular, are likely to increase their share of the standby market, partially at the expense of nickel cadmium.

Mr Alan Rowlett, marketing director of Hawker-Siddeley's group's Tungstone Batteries industrial division, estimates that lead acid batteries now occupy 75 per cent of the UK stationary standby market, with nickel cadmium taking 25 per cent. The development of recombination cells is likely to be a factor in any further trend towards lead acid batteries, he believes.

In conventional lead acid batteries, gases generated during charging are released to the atmosphere through vents in the battery lid. This results in a reduction in the water content of the electrolyte and the need for periodic topping up with water. The key to lead acid recombination technology is the recombination of virtually all of the gases generated during charging to form water. The battery can now be sealed for life at the factory.

The development of sealed, maintenance-free batteries provides a series of benefits to the user, says Mr David Miller, head of planning for the Chloride Group. "Everything has to be looked at occasionally, but there is no practical maintenance involved such as topping up. Various benefits follow from that."

"If you don't need to provide that maintenance, there is no need for space above the battery for someone to get in there with his water bottle and his tube. So you can now have different configurations. It does not give off gases and sulphuric acid fumes, and so is safer. There is no need for special protection for electrical equipment or to place the battery in a separate room. Uninterruptible power supply (UPS) systems provide by far the fastest-growing market for batteries in Europe and possibly worldwide, Mr Rowlett says. He believes UPS systems now form one-third of the battery market from spare figures a few years ago. UPS systems generally provide 10-15 minutes standby for standby generators to start up, or to carry out an orderly shutdown on the equipment load.

## Bulky

Tungstone has supplied one major UPS manufacturer with batteries for a number of years. Ten years ago, the company used a high-performance Planté battery. Mr Rowlett says: "They had a long life but were expensive and bulky. As the time element required of UPS systems shortened, the company tended to switch to ultra high-tending towards sealed lead acid batteries, with voltages as high as 440V. We see the same trend throughout the industrialised world."

"The flat voltage characteristics of sealed lead acid batteries permit electronic equipment to be designed and to operate within a very close 'voltage window. It is the large variation in voltage during discharge which electronic equipment doesn't like."

The maintenance-free aspect

CONTINUED ON PAGE 3

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The lives you risk when you miss a beat  
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## Standby Power 3

Fail-safe back-up maintaining power to smaller computers

# Vital plant goes electronic

IT IS often thought that the only time standby power will be called on is in the case of dire emergency. Flood, tempest, and strikes are the most commonly quoted examples.

It is a fact of modern, high-technology life, however, that vital processes can fail, or pack up completely even when such spectacular exigencies do not exist.

In a large refinery or chemical works, even if power is not interrupted, it is vital to ensure the integrity of the control system, says Mr Richard Tonge, director of Honeywell Control Systems' process control division.

In the past, control has been by discrete instrumentation, so should one loop fail, the rest of the process carries on, provided power is there. Process controls are now much more integrated.

Not years ago, too, most control systems were pneumatic, using large compressors, so that even if the compressors failed, there was enough air in the system to be able to shut down the plant safely. Controls are now electronic, Mr Tonge notes.

Honeywell builds redundancy into its process control systems so that should the basic controller fail, a reserve controller automatically takes over without feeling the bump.

Nevertheless, over the years, the central control room in a large industrial plant has assumed much greater significance, as plant manning levels have been reduced. Systems are designed, therefore, for a gradual degradation, so that in the event of failure there will be a step-by-step closure. Having spent a lot of money on a sophisticated shutdown system, industry needs to ensure that the system is ready to operate.

Uninterrupted power from one source or another is vital for any orderly shutdown, Mr Tonge says.

Security is another area where an uninterrupted power supply is vital, as more and more security systems are moving towards electronic monitoring.

Uninterrupted power supply (UPS) systems using static inverters — for converting from

### The main generating set markets - 1983

	UK	U.S.A.	Japan	West Germany	France	Italy (incl. New)	Total
Saudi Arabia	23,182	32,213	25,646	17,085	5,998	9,832	123,955
Iran	20,844	70	11,942	30,263	10	642	62,671
Nigeria	21,088	2,175	10,233	3,987	4,946	8,365	50,794
Algeria	923	261	31,896	2,253	11,450	1,683	48,378
Iraq	9,806	835	11,436	16,039	2,285	—	40,322
Indonesia	571	237	13,359	8,077	6,409	—	29,143
India	2,716	1,474	24,385	32	306	—	29,143
U.S.	—	26,382	246	157	—	—	27,685
Egypt	3,110	5,283	7,669	3,532	1,656	—	21,170
South Korea	4	6,904	11,775	1,123	—	—	19,806

† Includes petrol-powered sets.  
Source: Association of British Generating Set Manufacturers.

DC to AC — with sophisticated switching are generally recommended as support for Honeywell controls. "Power requirements are small, and with time will become even smaller," says Mr Tonge.

There is also a trend towards distributed computer systems, for example, with computers needing less power. Both of these factors point towards an increasing use of UPS systems with static inverters.

### Solid state

"Nowadays, by far the largest proportion of uninterruptible power supplies installed are all-electronic," says Mr Michael Taylor, marketing director of Chloride Power Electronics. They use various semiconductor switching technologies to generate the required AC power. Solid-state power supplies of up to 180 kVA load rating in a single cubicle are not uncommon.

UPS systems are normally used as on-line power supplies, continuously conditioning the AC supply to the load, protecting it from any short-term transients in the public AC supply. They have the added benefit of some sort of stored energy to sustain electrical power during mains power cuts.

"There is no switching at all in the event of a power cut," emphasises Mr Taylor. "The vital load receives its AC power from a static inverter when the public AC supply is healthy, and receives its AC power from the same static inverter, without a break, when the mains has failed."

"When the mains is healthy, the static inverter is powered indirectly from the mains. When the mains has failed the static inverter draws its power from rechargeable batteries. In the unlikely event of a static inverter failure, the load will switch from the static inverter to an auxiliary AC supply by means of a static switch."

Emerson Industrial Controls is one of the principal manufacturers of static inverter UPSs. "As the mini and micro computer have become more powerful, they are gradually taking on many of the operations carried out by large mainframe computers," says Mr Jeremy Stagg, the company's manager.

"Therefore, a need has arisen for data security by maintaining power to the smaller computer at all times." Emerson has recently developed a single-phase UPS system for computers in the 3 kVA to 10 kVA range. It has been designed as a peripheral, to be accommodated in the computer room. Emerson's system uses a static inverter.

The main alternative to the static inverter UPS system is the rotary UPS. Some systems use a flywheel to store energy, so that when there is an interruption or fluctuation in the mains supply, the stored energy in the flywheel will carry the load over it.

The heart of the UPS system devised by the German group Anton Piller is a combined motor alternator with the winding of both motor and alternator on the same stator, the so-called Umblock. When the three-phase AC power is applied

to the motor windings, a rotating magnetic field is produced. This rotating field will turn the rotor of the system.

"More than 90 per cent of all break or losses in the mains supply last less than 100 milliseconds," points out Mr Phillip Fryer of Anton Piller. "These are catered for by the ride through of the Umblock machine, without the need of the battery supply. The Umblock is designed to carry out all voltage control and isolation for the system. It uses no brush gear and simple bearings with an estimated lifetime of between 70,000 and 100,000 hours."

"As a secondary protection, temperature sensors are fitted to the bearings and windings of the machine to ensure that should maintenance fail, or should the change time of the bearings be exceeded, the machine will fail safe."

In systems was recently supplied to British Telecom International for Aerial 5 at Goomhill Downs satellite earth station. The aerial provides access to the Marconi A satellite network by the International Maritime Organisation to provide ship-to-shore communications in the Atlantic. The local mains supply is subject to fluctuations and interruptions because of the remote location.

### Rotary

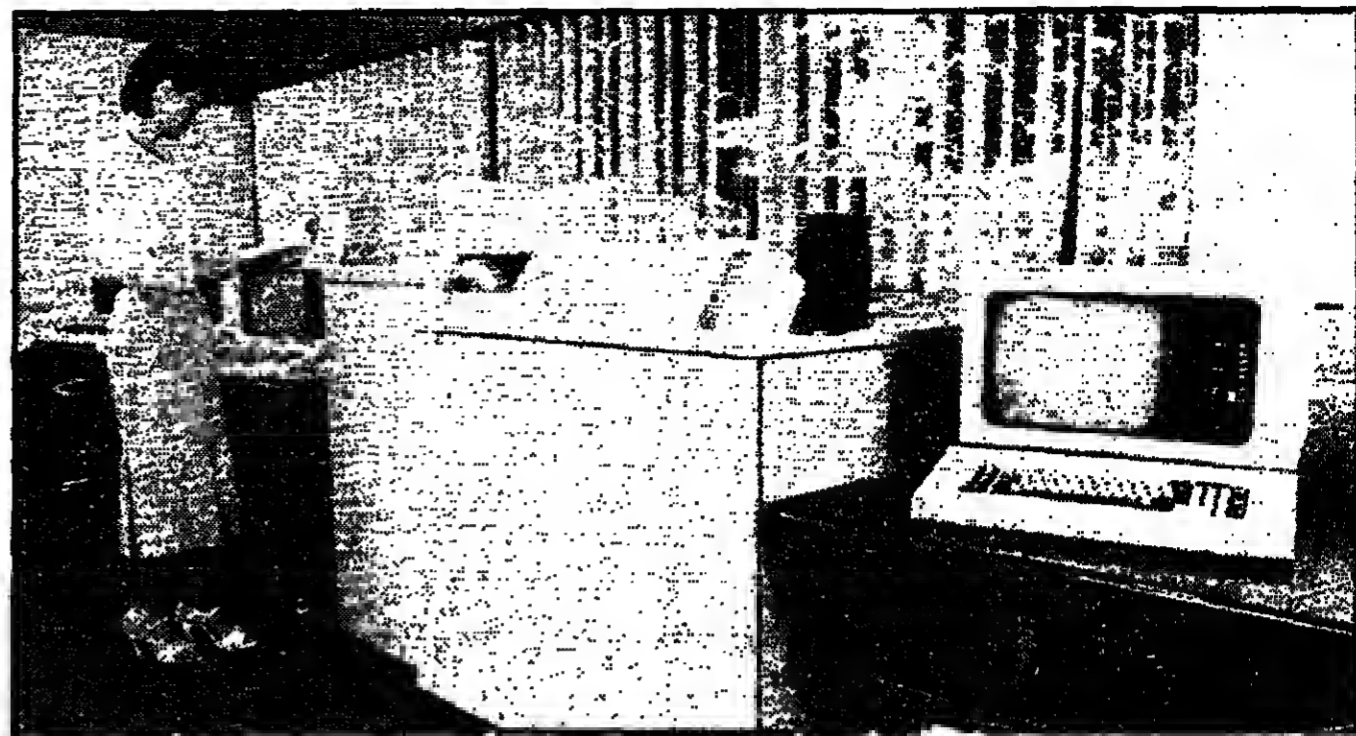
A back-up power system supplied recently by British Airways for its new computer centre is another example of a rotary UPS. BA's computer centre comprises six computers with on-line terminals, working seven days a week round-the-clock to handle international and domestic passenger reservations, departures, and flight and cargo control.

Holec has installed five Holec/Hemaf rotary no-break sets, connected in parallel for BA. Should one set fail, or be out of service for maintenance, a full load is maintained by the remaining four. These 450 kVA diesel type, no-break sets were part of a power supply order which included three standby generators, a main distribution switchboard and a fuel storage and automatic transfer system.

This parallel connected type system is available in diesel and battery versions. It filters and stabilises the main supply, as well as taking over instantaneously as a short-term, emergency source of energy should the mains power fail.

Sizes of the sets range from 20-150 kVA for battery fed units and 100-150 kVA diesel, which has a flywheel to store energy driven units. For 60 Hz applications, the maximum unit size is 400 kVA. By combining individual sets in parallel, ratings up to 2,000 kVA can be achieved. Output frequency and voltage deviations are within +/— 1 per cent of 50 Hz or 60 Hz.

The emergency source of the UPS is connected in parallel with the mains, and a blocking filter prevents power-line disturbance reaching the load from the mains. The rotating machinery can supply short circuit currents of ten times the full load capacity, to operate the necessary protection should a fault occur in one of the load feeders.



The new generation of UPS systems have been designed to sit alongside computers, to protect them from any interruption or fluctuation in the mains supply

# Only generating sets from these manufacturers have the ABGSM Guarantee of Work

Reliability is the key to any generating set installation — and it shows in design parameters, build procedures, testing and in the commercial viability of the manufacturer. That's where members of the Association of British Generating Set Manufacturers come out ahead.

Association guarantees to complete the installation should a member company go into default before the job is completed. It's a scheme that underwrites the strongest companies in the British generating set industry — and the wisest customers.

Come alongside — for complete protection from power cuts without risk.

Aggreko Generators Ltd  
Overbury Avenue  
Dunbarton G82 2RL  
Tel: 0360 67821 Telex: 779311

Dale Electric of Great Britain Ltd  
Electricity Buildings  
Foley, N Yorkshire YO14 9PJ  
Tel: 0723 514141 Telex: 52163

Hawker Siddeley Power Plant Ltd  
Thrupp, Stroud  
Gloucestershire GL5 2BW  
Tel: 0453 885166 Telex: 43566

Anto Diesels Braby Ltd  
Mill Street  
Uxbridge  
Middlesex UB8 2QG  
Tel: 0895 35262 Telex: 263835

Dawson Keith Ltd  
Deakay House  
Brockhampton Lane  
Havant, Hants PO9 1QH  
Tel: 0708 474123 Telex: 85491

Petlow Ltd  
Sandwich  
Kent CT13 9NE  
Tel: 0304 613311 Telex: 96328

Broadcrown Ltd  
Mill Street  
Stone, Staffs ST15 6BA  
Tel: 0785 817513 Telex: 36401

Eloquip Ltd  
Gloucester Crescent  
Wigston, Leicester LE18 2TN  
Tel: 0533 772711 Telex: 341263

R T D Swan Ltd  
Swan Close Road  
Banbury, Oxon OX16 8AH  
Tel: 0295 61607 Telex: 83426

Countryman Power Plant Ltd  
Fleming Way  
Crawley  
West Sussex RH10 2JY  
Tel: 0293 519222 Telex: 57229

Transmits Ltd  
Telford Way  
Thetford  
Norfolk IP24 1HU  
Tel: 0842 4817 Telex: 81626

# ABGSM

Association of British Generating Set Manufacturers  
Queensway house, 2 Queensway, Redhill, Surrey, RH1 1QS Tel: 0737 68611 Telex: 948669

## State of the art equipment needs state of the art power

Fragile computer memories can be wiped out by poor quality mains electricity. In the blink of an eye, vital data can be lost, and computing interrupted by even momentary variations in the public supply. That's why computer users around the world safeguard their installations with Transpack electronic power supply systems. A Transpack uninterruptible power supply (UPS) delivers the dependable, precise power needed by today's computer-based equipment. From desktop machines to large mainframes.

Drawing together the state of the art in battery technology, and the state of the art in static power conversion, Chloride Power Electronics offers a complete range of secure power systems — from 0.25kVA to 270kVA. Not just for computers, but also emergency lighting, fire and gas alarm systems, telecommunications equipment and other vital systems in industrial and commercial plant, onshore and offshore. Write or telephone, to find out how we could help you through the UPS and downs of your electricity supply.

## CHLORIDE POWER ELECTRONICS

a division of Chloride Systems Ltd  
Barton Park Industrial Estate Eastleigh Hampshire SO5 5RZ  
Telephone 0703 610311 Telex 47273

## Batteries market still growing

CONTINUED FROM PAGE 2

makes it particularly applicable also for remote applications such as telecommunications repeater stations or microwave links. "Before the advent of sealed lead acid batteries," suggests Mr Millar, "such remote sites would have either used generators or batteries with excess electrolyte. These would give more scope for boiling off the water content and so they would need refilling less frequently. Nevertheless, they would require more frequent maintenance than the new generation."

Now the remote station can be run on a diagnostic system. A maintenance engineer is sent out only when something actually goes wrong. Remote diagnostics are now used not just for microwave repeater stations but for telephone switching exchanges also. In America, remote switching offices in suburbs are being placed underground with their battery back-up as there is no need for special ventilation with sealed lead acid batteries.

Intelligent, microprocessor chargers can constantly evaluate the health of the battery. Whereas the ordinary charger feeds in electricity to the battery without taking information from the battery, the microprocessor charger takes information

from it to help adjust the charging to suit the battery's condition.

"Most telephone exchanges traditionally have had a special room with rows of batteries for standby requirements," points out Mr Michael Mayer of the Lead Development Association.

"With the development of sealed lead acid batteries, there is now a marked movement to decentralise the power supply and to place it in the rack with the electronics it is supporting. This has obvious benefits of savings in space, cabling and probably provides a more reliable system. These changes will feed their way back into smaller standby applications."

Chloride's Power Safe range of sealed lead acid batteries was actually developed in co-operation with British Telecom while Tungstone Batteries' Challenger series received BT approval early last year.

The shape and size of a battery installation has an important bearing on comparisons by volume, weight and cost for discharge rates in excess of one hour. Then cost comparisons between sealed lead acid batteries and the more traditional type of lead acid battery become similar. But there are still advantages in the ability of sealed units to provide a more compact installation, says Dr Geoffrey May of Tungstone Batteries, one of the speakers at the 4th ERA Technology

Battery Seminar being held in London later this month.

"Consideration of economic service life may dictate that the application requires a product with greater durability either in terms of cycle life or duration. For these reasons, both tubular and Planté cells will continue to be specified. Correspondingly flat pasted plate cells are more effective at lower discharge rates and will continue to find application in many areas."

Nickel cadmium batteries also have their unique characteristics. Mr Reg Judson, chief battery engineer for Saft (UK), sees a trend away from traditional lead acid batteries towards nickel cadmium, particularly for starting standby generators and for emergency lighting. He acknowledges that sealed lead acid batteries are a major advance, particularly for large industrial applications, but for smaller applications, such as emergency lighting, nickel cadmium cells "generally give better performance."

Recent work at Saft has resulted in the development of a sealed nickel cadmium cell for self-contained emergency lighting installations.

Saft has recently developed a nickel cadmium vented cell using advanced aircraft battery plate techniques. The key to the new development is the plate combination: the use of a sintered positive plate and a pocket negative plate.

Such hybrid cells may tend to become more important for higher rate applications, according to Dr May. The traditional pocket plate nickel cadmium cells will continue to be used where mechanical ruggedness, abuse resistance, good cyclic characteristics and extended life in floating service are required. "However," says Dr May, "sealed lead acid cells are likely to find increasingly broader application with the continuing trend for electrical

### STAND-BY INVERTERS FOR EMERGENCY POWER

12V or 24V (car battery) to 240V at 50 Hz  
Units available: 70 watts to 400 watts output

Details from:

S.A.C. (Electronic Products) Limited  
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**CRENDON**  
VERSATILE  
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HP18 9BB  
Tel. Long Crendon (0494) 208481  
Telex: 83249

## \$15m work for Moss

WILLIAM MOSS CONSTRUCTION has been awarded contracts worth more than \$15m, including an office block in Stanmore for the Automobile Association and major retail developments in Wilton, Melton Mowbray and Nottingham.

Work has started on the offices for the AA, on the Broadway in Stanmore, in a contract worth just over \$5m. The project includes shop units, a multi-storey car park, in Melton Mowbray, the group is building Phase II of the Bell Centre Development for the Leicestershire Co-operative Society. The scheme, worth \$1.25m, comprises reconstruction of the Corn division building, together with a further 21 retail units. Moss is already working on Phase I of the centre which involves retaining the existing facade of the old Bell Hotel.

For Raglan Property Trust, Moss is building a supermarket and 18 shopping units, and altering the existing Waitrose in Wilton town centre to provide six new shopping units, in a contract valued at \$2.85m. In Nottingham, the group is carrying out construction of the North End Food Court at the Victoria Centre in a £2m contract for Capital and Counties. Other major contracts include construction of staff accommodation at Stockton Hall Young Offenders Establishment, for the PSA, for \$2.2m.

For Esso, the group is extending an engine testing laboratory at Abingdon, for just over \$750,000 and, in Church Street, NWS, flats and shops are to be built for the City of Westminster in a \$300,000 contract. In Dudley Moss is carrying out alterations at the Guest Hospital for the Dudley Health Authority in a contract worth more than \$400,000.

**NORWEST HOLST CONSTRUCTION** has been awarded a \$1.5m contract by Smiths Industries to build a production unit at Waterloo Road, London, comprising a two-storey office and production building of twin steel portal frame construction; offices are steel framed with a precast concrete plank floor, all with mass concrete foundations. The buildings are generally clad in profiled metal sheeting with facing brickwork to the offices. Work has started for completion in September.

## BUILDING CONTRACTS

### Taylor Woodrow to build \$16m Malaysian offices

BY JOAN GRAY, CONSTRUCTION CORRESPONDENT

Taylor Woodrow's Malaysian associated company, Teamwork Corporation, has won a \$16.5m (£4.7m) contract to build a 31-storey office building and adjacent 4-storey car park in the centre of Kuala Lumpur.

The order has been placed by UIC Realty Sdn Bhd. The development, to be known as Menara Boustead, is due for completion in October 1988.

It brings the total value of work booked by Teamwork Malaysia since September 1984, to \$24.3m, following a \$9.8m contract for a twin office tower development for United Estate Projects Sdn Bhd.

**\$28m orders for Cementation**  
Two major contracts for its North American companies feature in CEMENTATION's division's latest \$28m round of orders.

The largest, just under \$10m, is for Cementation Canada to construct a 344 metre deep, 6.5 metre diameter ventilation shaft at Roger's Pass, British Columbia. The concrete-lined shaft will ventilate Canadian Pacific's 14 km 18.6 mile long Mount Macdonald tunnel, currently under construction to improve rail traffic through this section of the Rockies.

In the U.S., Cementation America is starting work shortly on a \$9m in-line sewerage pumping station over 100 metres beneath Milwaukee. Because of water-saturated soils, artificial ground freezing techniques will be needed during construction of three 6 metre diameter shafts to the underlying limestone in which the pumping station will be built. The work for Milwaukee's Metropolitan Sewerage District, is part of a Federal programme to improve water quality in the Great Lakes.

For the PSA in the UK, Cementation Construction has started work on a \$2m contract at the RAC gunnery school at Lulworth, Dorset and has a further \$2m in recent work spread throughout the UK including a strategic industrial site access road for the Borough of South Tyneside and a phase of the River Darent improvement

Taylor Woodrow has been operating in Malaysia since the 1950s and the company, which was the precursor of Teamwork, was formed in 1983. Previous projects include housing estates, the Champion Motor commercial vehicle assembly plant, glass and sewing machine factories. The company has recently completed a \$28.3m terminal building at Kuala Lumpur Airport and is also working on a \$25m shop, office and car park development for Fima Supermarkets.

Teamwork is owned 49 per cent by Taylor Woodrow and the remainder by local trading companies.

**Design and build contracts** valued at \$8m have been won by JAMES LONGLEY AND CO for projects in Middlesex, Sussex and Kent. Largest is for \$6,000,000 of central offices for Sevenoaks District Council located on the site of the existing premises and municipal swimming pool. Longley is awarded the contract following a public exhibition of the alternative schemes. At Bugner Regis, Longley is undertaking the second phase of office and production facilities for Rosemount Engineering, manufacturer of aircraft control equipment. The \$4,000,000 project involves property with a high degree of internal flexibility to accommodate changing layout requirements. Completion is scheduled for October 1985. At Perivale, Longley is about to build 60,000 sq ft of warehousing for Postal Developments. This is the latest phase of the Perivale Industrial Park.

**E. Thomas wins \$12m in west**  
Construction contracts in Devon and Cornwall worth more than \$12m have been won by E. THOMAS AND CO, part of the Mowlem International construction group, for development of a dockyard and include construction of the D83 central frequency charger station, on the old Tamar Brewery site, worth \$5.7m, and a reinforced concrete

subway and gallery in the D60 dock worth \$1.7m. Other large contracts include fitting out five floors of a tower block at Derriford District General Hospital, Plymouth, valued at \$2.7m, and phase 3 of a housing project at Penwith District Council worth \$1.2m. Work has started on all the projects and completion dates extending to 1987.

IT IS the commercialism, and not the mere fact of surrogate motherhood that continues to rouse public anxiety about the law's apparent inadequacy to deal with a growing social problem. It has led the social services department of at least one local authority, with doubtful legality, to intervene by making a child born last week in surrogate mother the subject of a place-of-safety order preliminary to obtaining a court order providing for the child to be taken into care.

Apart from judicially-controlled adoption and officially authorised fostering, the law is not supportive of those who wish to indulge in the marketing of children. In fact it frowns on the private transfer of parental rights and duties in return for payment.

At the turn of the century, the courts declared that a contract between the mother of an illegitimate child and a stranger to the child for the transfer to the latter of the rights and liabilities of the mother in respect of the child was invalid. Thus the mother was bound to continue to maintain her own child when the foster-parents had undertaken part of the bargain to maintain financially the child which she was looking after. The modern surrogate mother would therefore not be able to law to enforce her contract with the foster-parents.

The law's approach, however, derives not from any fondness

## THE WEEK IN THE COURTS

### Lagging behind society in rights for children

or protectiveness of children, but rather looks to the strict legal rights and duties of the biological parents. The history of adoption, not sanctioned by parliament until 1926, provides a classic example of the most unusual, if not unparalleled, failure of legal authority up till now to seize the force and direction of social pressures towards child welfare.

The judges of the past have the main responsibility for this, since it was they who persistently upheld the inalienability of parental rights, however negligent or incapable of properly exercising parental duties the parents might have proved to be. Even when legal adoption was first contemplated in the 1920s, the view was being officially expressed that more people would be anxious to get rid of children by way of adoption than would be prepared to adopt. Reality proved the opposite: the demand from suitable adults for children to be put in their families permanently has far exceeded children available for adoption.

The basic problem of adoption law, as with surrogate motherhood, is the checks on the power of adults to consent to their own interests and desires to the exclusion of the child's welfare. With rare exceptions, no child is available for adoption unless its parents voluntarily return it, and be ready to renounce for ever all rights in it. The court may dispense with a parental consent if the parent

is unreasonably withholding consent, but that is very much the exception. Children's couples, often as the result of the wife's infertility, are turning in surmountable numbers to the adoption market. As with adoption, the physical and psychological aspects of the process of surrogate motherhood need to be carefully understood.

Too often the obsessive desires of the prospective parents obscure the effects on the child. Such an approach is natural, and has in the past been allowed to dominate. The history of the law relating to infants is instructive. In 1871 a report of a select committee of the House of Commons stated: "In determining on the best means of preventing the destruction of the lives of infants put out to nurse or hire by their parents, it is necessary to bear in mind the obvious distinction between two classes of cases which have been brought before our committee: first, when the children are put out for hire with the deliberate knowledge, and probably also with the deliberate intention that they will be sure to die very quickly; and secondly, that class of cases where the children are loaned out entrusted to the care of others, either in the daytime or by the week, that the mothers may return to, and be enabled to carry on their usual employment."

At that time adoption and legitimation were not legally possible, and there was as yet no organised supervision of children boarded out or fostered. A series of acts of parliament, from the Infant Life Protection Acts, starting in 1874, through to modern child welfare legislation, has protected children against their parents' cruelty or neglect but has observed no major problem in the field of child welfare.

Successive reports from committees on the subject have pointed out that legislation in relation to children, such as fostering and adoption, depends more on the people who implement it than on the written word. The development of social work in the last 15 years has resulted in a much greater importance being placed on the interests of children, but the law, particularly as reflected in court decisions, still lags behind the social pressures by declining to accord any notion of rights to children.

The absence of children's rights has exposed most starkly the inherent weakness of the Court of Appeal's decision in the Gillick case. There the Lords, following an Appeal that cleared the way for a Department of Health and Social Security circular to the medical profession indicating that doctors had a discretion whether to give contraceptive advice and, if necessary, treatment to prevent unwanted pregnancies without obtaining the consent of a

parent of a child under 16. The whole emphasis of the judgment upon parental rights and duties, denied the existence of the fact that the girl who consults a medical practitioner without telling her parents herself is entitled to legal rights as against her own parents, and entitled to expect medical respect for her choice of consultant.

Normally the law has to intervene to protect those who are too young to consent to surgery that may not be for their benefit. Parents are then consulted in supply the necessary consent. When however, the action is preventive and involves no surgery, but merely an individually desired interference with the reproductive process, the social consequences of denying doctors a discretion, whether to inform the patient's parents must become of paramount consideration.

The defect in Mrs. Gillick's intention, that every parent is bound to be consulted before their teenage daughters can obtain contraceptive advice and treatment, is that her stance springs not from the social and personal consequences that flow from medical practice but from a narrow religious perspective that she is entitled to prescribe for her children, not just for her own children, but for the rest of British society.

Justinian

## APPOINTMENTS

### Executive posts at NCB (Enterprise)

Mr Anthony Hewitt has been appointed by the National Coal Board to be the new chairman of the industry's new job creation subsidiary, NCB (ENTERPRISE). Mr Hewitt joined NCB (Coal Products) in 1980 as finance director and was also latterly a director of National Smokeless Fuels, Thomas Ness and Staveley Chemicals and an alternate director of Nyrpo.

Mr Robert Spragg, who is to be the company's chief accountant, was previously deputy to the director of capital expenditure at the NCB.

Mr Peter McMaster has been appointed director general of the ORDINANCE SURVEY in succession to Mr Walter F. Smith, who has retired in April. Mr McMaster is at present director of marketing, planning and development at Ordnance Survey.

W. CANNING MATERIALS has announced the appointment of Mr W. E. I. Galloway as managing director. Mr Galloway, who was previously marketing director in September 1984, was previously marketing director, heading Canning Materials' UK sales operation.

Mr P. H. Dean will be retiring from the board of the EURO TINTO-ZINC CORPORATION on March 31, to concentrate on other interests. Mr Dean is a part-time member of the Mono-

poles and Mercers Commission and a non-executive director of Associated British Ports Holdings. He joined RTZ in 1966 and became a member of the main board in 1974.

Mr Dennis Hall has been appointed deputy general manager of the NATIONAL WESTMINSTER BANK premises division. He was previously chief manager of the division.

Mr Henry Fearn, secretary of Allied Lyons, has been elected president of the INSTITUTE OF CHARTERED SECRETARIES AND ADMINISTRATORS.

Mr Philip Conacher, a director of Baxi Doves in Leeds, has been appointed a director of RHAIS, the company owned jointly by Bain Davies and the Road Haulage Association.

Mr John Gordon has been appointed managing director of PROVIDENCE CAPITOL FUND MANAGERS, a new company formed within the Providence Capital group to launch a range of unit trusts. Mr Gordon was for many years a main board director and senior investment director of Abbey Life and was involved in the creation and direction of Abbey's unit trust company.

Mr Peter Wintgens has joined WIGHAM POLAND REINSUR-

ANCE BROKERS as a director. He was previously with Jauth & Huebner in Hamburg.

Mr Edmund (Ted) Shipway, who founded the firm of EDMOND SHIPWAY & PARTNERS, chartered quantity surveyors, in 1963, retired as its senior partner at the end of December. He is succeeded by Mr George Elliott.

Mr Christopher Taylor, group treasurer of TARMAC, has been appointed assistant group finance director. He joined Tarmac as group treasurer in 1976 from Hill Samuel Development Finance where he had been managing director.

Mr Peter Lloyd becomes chairman and managing director of LLOYD THOMPSON INSURANCE BROKERS with Mr John Lloyd as joint managing director. Mr Eric Thompson who retired as chairman remains on the board and continues as chairman of Lloyd Thompson.

Mr Nigel Hunter has been appointed marketing director of EDEN VALE. He joins from Birds Eye Walls where he had been marketing manager—fbb since 1981.

Rickey Tibble and Partners has changed its name to TIBBLE COMMUNICATIONS and appointed Mr Robert Hadfield as its new managing director.

Mr He was an associate director of Wakefield Chegwain Advertising.

**NEW LONDON PROPERTIES** has appointed Mr Peter J. Newberry as managing director in succession to Mr S. J. Twentyman Turnbull who has retired. Mr S. Bennett has been appointed deputy chairman.

**TECHNICALOR**, London, has appointed Mr Ashley Hopkins, controller of plant and engineering, Mr Simon Baxter, controller of sales and marketing, and Mr Ian Mackay, company secretary in the board of the UK company.

Mr Anthony J. P. Convey has been appointed production director of the Bell Park division of STAFFORDSHIRE POTTERIES. He will be responsible for all three Kilncraft manufacturing units. He was in charge of the holloware division.

Mr P. A. Carpenter has been appointed to the board of JOHN TAINSON as sales director. He was sales manager.

ITC and The Micro Equipment Centre, both part of the Audio-Graphic Group, have appointed Mr Tony Fitch as managing director.

Mr Paul Cutler has been appointed to the board of COTRAL-PICKFORDS, with special responsibility for ex-

panding international business. He is manager of the Cotral S.A.R.L. office in Chetumal, Cotral-Pickfords Ltd is a subsidiary of the National Freight Consortium.

Mr Paul Combes and Mr Archie Norman have been elected principals of MCKINSEY & CO. INC., in the London office.

Mr Irvine Simpson has been appointed company secretary of THE MORGAN CRUCIBLE COMPANY, following the retirement of Mr Adrian Davis. Mr Simpson was previously group manager—legal affairs.

Dr Christopher Lead, has joined BRITISH PEPPER & SONS as technical director. He worked previously for Bowers, Lucas Ingredeants, R.H.M. and Arthur Guinness.

MARLEY FLOORS new production director is Mr Charles W. He was general works manager.

Dr Peter H. Campbell is appointed a director of SCOTTISH PROVIDENT MANAGED PENSION FUNDS from January 11.

Mr M. G. Ware has been appointed financial director and company secretary of KLUWER PUBLISHING.

## Company Notices

### NOTICE OF REDEMPTION

#### EUROPEAN COAL AND STEEL COMMUNITY (E.C.S.C.) USS\$50,000,000 7% Bonds 1974/89

The Commission of the European Communities inform herewith the Bondholders that a selection by lot for a principal amount of USS\$3,900,000, has been made for the redemption due 1st February, 1985 in the presence of a Notary Public at the Chase Manhattan Bank N.A., New York.

The serial numbers of the Bonds to be redeemed are set forth below in groups from one number to another number, both inclusive, except such as shall have been previously called for redemption or otherwise retired:

3201 to 3400	5001 to 5200	6001 to 6200	10801 to 11000
12801 to 13000	15401 to 15600	16201 to 16400	17001 to 17200
17401 to 17600	21401 to 21600	22801 to 23000	25801 to 26000
26001 to 28400	28801 to 29000	29201 to 29400	30001 to 30200
31001 to 31200	33601 to 33800	34001 to 34200	35401 to 35600
36001 to 38600	41001 to 41200	44401 to 44600	49401 to 49600

Principal amount of Bonds purchased: USS\$50,000,000.  
Principal amount called for redemption: USS\$3,900,000.  
Principal amount unamortised after 1st February, 1985: USS18,000,000.

The Bonds presented for reimbursement should have attached Coupons due 1st February, 1985 and following, and will be payable in accordance with the Terms and Conditions shown on the Bonds.

7th January, 1985

### SAMSUNG SEMICONDUCTOR AND TELECOMMUNICATIONS CO. LTD.

USD 30,000,000 FLOATING RATE NOTES DUE 1994  
GUARANTEED BY

#### SAMSUNG ELECTRONICS COMPANY LIMITED

For the six months from January 7th 1985 to July 8th 1985 the Notes will carry an interest rate of 9% per annum. The interest payable on the relevant interest payment date, July 8th, 1985, will be USD 4,865.97 per USD 100,000 note.

Agent Bank  
Chemical Bank

### SWEDISH STATE HOLDING COMPANY

(Statförsäring Aktiefond)  
9% Bonds 1975/1985  
UA 20,000,000

On 21st January 1985, the Swedish State Holding Company (Statförsäring Aktiefond) issued twelve-month floating rate bonds.

The bonds are issued in two series: Series A and Series B.

Series A: 10,000,000 UA, 9% interest rate, redeemable on 21st January 1986.

Series B: 10,000,000 UA, 9% interest rate, redeemable on 21st January 1987.

The bonds are issued in two series: Series A and Series B.

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## Public Notices

### NOTICE

PUBLISHED BY THE SECRETARY OF THE TELECOMMUNICATIONS ACT 1984

On 21st December 1984 the Secretary of State for the Home Department issued a notice under section 1(1) of the Telecommunications Act 1984.

The notice provides that any person who is a licensee under the Act shall be liable to a fine of not more than £1,000 for each day on which the offence is committed.

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## BUSINESSMAN'S DIARY

## UK TRADE FAIRS AND EXHIBITIONS

**Current**  
London International Boat Show (0632 45411) (until January 13)  
Earls Court

**January 7-10**  
International Amusement Trades Exhibition (01-228 4107) Olympia  
January 8-10

**CAD/CAM - International - Show**  
(01-837 8899) NEC, Birmingham  
January 12-17

**Harrogate International Toy Fair**  
(01-228 6888) Harrogate  
January 15-18

**Which computer? Show** (01-581 5051) NEC, Birmingham  
January 17-20

**Ideal Home Exhibition** (0202 588655)  
Metropolitan Exhibition Hall, Brighton

**January 20-24**  
International Lightshow Exhibition (03534 555) Olympia

**January 26-30**  
Stationary Industry Exhibition - STATINDEX (01-385 1200) Olympia

**January 26-30**  
British Toy and Hobby Fair (01-701 7127) Earls Court

**January 30-February 3**  
International Swimming Pool and Leisure Show. (Trade: Jan 30-31) (07322 2875) Wembley Conference Centre

**February 3-7**  
International Spring Fair: Gift Show (01-855 9201), Hardware and Housewares Show (0604 22023) NEC, Birmingham

**February 8-10**  
Cruft's Dog Show (01-493 7838) Earls Court

**February 10-13**  
International Men's and Boy's Wear Exhibition (021 705 6707) Olympia

## OVERSEAS TRADE FAIRS

**January 7-10**  
International Hotel and Catering Industries Trade Fair - IORE CAVA (01-437 2175) Amsterdam

**January 10-14**  
International Furniture Exhibition (01-439 3644) Paris

**January 13-16**  
Fashion Show (01-486 8686) Rio de Janeiro

**January 21-25**  
International Record and Music Publishing Market - MEDEM (01-499 2317) Cannes

**January 30-February 2**  
International Holiday Fair and Exhibition - FERIEFEST (01-891 2606) Vienna

**January 26-30**  
Testing Show - INSTRUMENTASIA (01-486 1851) Singapore

**January 30-February 2**  
The International Building Materials and Systems Show (01-486 1851) Hong Kong

**February 2-7**  
Middle East Electronic Communications Show and Conference - MECOM (01-486 1851) Bahrain

**February 8-17**  
International Boat Show (01-486 1851) Helsinki

**February 20-24**  
International Holiday Fair and Exhibition - FERIEFEST (01-891 2606) Vienna

## BUSINESS CONFERENCES

**January 20-25**  
Tavistock Institute of Human Relations (Zurich), 1985 Tavistock working conference on rethinking, implementing and managing organisational change (01-435 7111) Master Lovell

**January 22-23**  
FT Conference: Pensions in 1985 (01-421 1355) Inter Continental Hotel, W1

**January 23**  
The Institute of Purchasing and Supply: Basic arts of buying (0750 5677) Cumberland Hotel, W1

**January 23-25**  
Management Centre Europe: Business fronts - their prevention and detection (Brussels) (021 516 19 11) Portman Hotel, W1

**January 25-30**  
FT Conference: Seminar on the City as a financial and trading centre (01-621 1565) Skitman's Hall, EC4

**January 30-March 6**  
IPM: Flexibility in working time cost effective initiatives for managers (01-946 1000) Embassy Hotel, W2

**January 30**  
Church House, Indonesia at the start of the fourth five-year plan (01-930 2233) London, SW1

**January 30**  
Institute of Management Consultants/Department of Production, Birmingham University: Managing the 1990s - A framework for business planning (01-484 7235) Birmingham University

**January 31**  
Foundation for Science and Technology: Seminar on technology transfer within the EC (01-406 0421) RSA House, London

**February 4-5**  
Risk Research Group: Reinsurance practice (01-236 2175) Kensington Palace Hotel, W8

**February 4-5**  
Brunel Institute: Organisational design and levels of management (0895 5461) Uxbridge

**February 14-15**  
Oxytec/IBC: The cost and application of benefits of Micro CAE (01-437 9080) Cafe Royal, W1

**February 14-15**  
Risk Research Group: The future of Lloyd's (01-236 2175) Great Eastern Hotel, EC2

**February 16-19**  
Open Computer Security: The International Data Security Conference 1985. (0753 672191) Deodar Hotel, W1

**February 20-21**  
FT Conference: The Third Automated Manufacturing Conference - Challenges for management (01-421 1355) Inter Continental Hotel, W1

**February 26**  
Longman Seminars: Will drafting (01-242 2546) Barbican Centre

**February 27**  
TWP: Text Communications 1985 (01-243 4141) London

## Contracts and Tenders

GENERAL PROCUREMENT NOTICE  
GHANA COCOA BOARD

The Government of Ghana has received a credit from the Special Fund (Credit Number SP-4-GR) administered by the International Development Association, towards the cost of an Export Rehabilitation Project. International competitive bids are now invited for the supply of the goods listed below:

CATEGORY	ITEM	DESCRIPTION	QUANTITY
1	1	10 tonne cargo trucks	34
2	1	10 tonne cargo trucks with winches	10
2	1	Agricultural tractors	10
2	2	Agricultural tractors with winches and trailers	10
3	1	Recovery vehicles	6
4	1	3 tonne cargo trucks	69
5	1	5 tonne cargo trucks	13
6	1	Mobile workshops	6
7	1	2700 litre fuel tank	1
8	1	Aluminium coil	50 tonnes

This invitation to bid is open only to those suppliers who can provide goods produced in countries participating in the Special Fund. A full list of these countries is available on request.

A complete set of bidding documents may be purchased by any eligible bidder on submission of a written application and upon payment of a non-refundable fee of US \$200. This fee should be deposited to the following account:

PNM & Co. - OCOBOD - Client Account  
National Westminster Bank PLC, 1 Princes Street,  
London EC2P 2AR

SHORT CODES: 56 - 00 - 01 ACCOUNT NO 140 - 0 - 01767353

All bids must be delivered to the office of:

The Acting Procurement Manager, Ghana Cocoa Board,  
1st Floor, Cocoa House, Accra, Ghana.

on or before 12.00 midday on 6th March, 1985

Interested eligible bidders may obtain further information and inspect, purchase the bidding documents at the office of:

(1) The Acting Procurement (2) Mr. L. Zurich,  
Manager,  
Ghana Cocoa Board,  
1st Floor,  
Cocoa House,  
Accra, Ghana.

The sale of bid documents will commence on 7th January 1985.

HOSPITAL MEDICAL EQUIPMENT  
MAINTENANCE

COMPETITIVE TENDERING

The Basingstoke and North Hampshire Health Authority is investigating the feasibility of placing the "in house" comprehensive maintenance of electronic/electrical medical equipment on tender. Organisations who wish to undertake this work should write to the:

District Offices, Basingstoke District Hospital  
Park Prewett, Basingstoke, Hants RG24 9NS

For additional information telephone:  
Mr. N. McNeil, Basingstoke 473202 ext. 5301

INSURANCE  
Housing insurance tries to weather a claims storm

BY ERIC SHORT

HOUSE INSURANCE has been a nightmare in the past 10 years for insurance companies in the UK. Payments to policyholders have soared as houses are buffeted by storms and flooded in winter, subsiding into the ground in summer and are increasingly burgled.

Not only is the weather and deteriorating social conditions affecting insurance companies. Policyholders are making more frequent claims on their house insurance policies; often for comparatively small amounts that are strictly covered by their insurance, such as claiming wear and tear as storm damage with the backing of their builder.

The result is that insurance companies have been underwriting losses on house insurance accounts climb steadily as claim payments and expenses rise faster than premium income, in spite of premiums on contents insurance being automatically index-linked to allow for inflation.

Commercial Union Assurance was first in the field putting up its house building rates to £1.60

Most leading composite insurers took drastic action towards the end of last year to rectify the position as far as contents insurance was concerned. Prudential Assurance made the headlines by trebling its premiums in London and other inner city areas for contents cover, with the new rates coming into operation at the beginning of this year. Other insurance companies also made significant increases even if they were not so dramatic as the Pru.

Now many more companies are taking corrective action on their house building insurance but the basic premium increases are modest in relation to the action taken on house contents. Premium rates are rising by a mere 5p per £100 of insured value, from £1.50 to £1.55 per £1,000 of insured value - the insured value of the house.

Commercial Union Assurance was first in the field putting up its house building rates to £1.60

on January 1. That followed a string of increases made on its house contents premiums on October 1, 1984.

It is being followed on February 1 by the three largest insurers in house building, Sun Alliance Group, Legal & General Group and World Assurance Group, all of which have large building society connections. In each case the new rate will be £1.60 per £1,000 of cover. Phoenix Assurance, now a member of Sun Alliance is putting up its rates to £1.60 on March 1.

General Accident Group and Guardian Royal Exchange Assurance have both taken the decision to increase rates to £1.60 but are still deciding on the timing.

The modest increase in the basic rates, however, is not likely to do much more than stave off the tide of rising underwriting losses.

It will be insufficient to offset the current experience of insurance companies, which shows

the number of claims in a year a third higher than in 1980 - the last time house building rates were increased - and to cover average claim costs which have risen far faster than inflation.

It will be insufficient if this year sees a repeat of 1984 when the severe winter costs the UK insurance industry £175m in adverse weather claims and the dry summer an estimated £120m in subsidence claims.

Insurance company underwriters are looking at 20 per cent rises in the past few years - to a basic rate of £1.80 per £1,000 sum insured, a rate considered the minimum necessary to get house insurance accounts back on an even keel.

Most house owners arrange their mortgages through building societies and most of those borrowers insure their houses through their building societies' block insurance arrangements even though they have freedom of choice of

insurer. Competition between insurance companies for building society block business is keen.

Leading societies have used their influence to persuade the top insurance companies to restrict the premium rise. In return, the societies have agreed to renegotiate commission payments. Such a renegotiation would be necessary in any event.

Commission payments received by building societies for house building insurance already rise each year in line with inflation because of the index-linking of premiums. It would be unfair if their commissions fell further this year because of the basic premium rise with no extra involvement by the societies.

In addition building societies have computerised their administration and are containing costs in real terms. So by next year, standard com-

mission rates on building society block insurance contracts could be averaging 30 per cent against the current 40 per cent, thus easing underwriting pressure on insurance companies. However, medium and smaller societies are generally opposed to commission cuts and a lot of hard bargaining is still necessary.

The increase in house building rates is by no means universal. Eagle Star Holdings, now part of BAT Industries, and Norwich Union Fire Insurance are still 2018 during their position but could follow later this year.

Prudential is adamant it will not increase its rates this year, possibly because its agents might revolt against two house insurance rate increases in a year.

Zurich Insurance is maintaining its rates for a few years but not involved in flood or subsidence risk situation and £1.50 otherwise.

Notice of redemption to holders of  
BEECHAM INTERNATIONAL (BERMUDA) LIMITED  
8¼% Guaranteed Bonds due 1986

Unconditionally Guaranteed by BEECHAM GROUP p.l.c.

NOTICE IS HEREBY GIVEN that, pursuant to Condition 5 of the First Schedule to the Indenture dated the 3rd day of February, 1971 between Beecham International (Bermuda) Limited, Beecham Group Limited and Eagle Star Insurance Company Limited, the Bonds bearing the undemoted serial numbers have been drawn for

redemption on 1st February, 1985 ("the redemption date"), by operation of the Sinking Fund at the redemption price of 100% of the principal amount thereof. Interest on each such Bond will cease to accrue from the redemption date.

## BONDS OF US\$1,000 EACH

1	343	2171	3144	3078	5014	6188	7721	9337	12376	13648	15944	16933	18706	19348	20014	21495	21848	23747	28366	28142	30457	31296	31973	32719	33251	34403	35138	36137	36811	38313	39138	40917	42302	42733	43797	44321
2	141	2171	3144	3078	5014	6188	7721	9337	12376	13648	15944	16933	18706	19348	20014	21495	21848	23747	28366	28142	30457	31296	31973	32719	33251	34403	35138	36137	36811	38313	39138	40917	42302	42733	43797	44321
3	141	2171	3144	3078	5014	6188	7721	9337	12376	13648	15944	16933	18706	19348	20014	21495	21848	23747	28366	28142	30457	31296	31973	32719	33251	34403	35138	36137	36811	38313	39138	40917	42302	42733	43797	44321
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**Closing prices, January 4**

**Continued on Page 23**

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**Continued on Page 24**

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Sales figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest trading day. Where a split or stock dividend amounting to 25 per cent or more has been paid, this year's high-low range and dividend are shown for the new stock only. Unless otherwise noted, rates of dividends are annual disbursements based on the latest declaration.

a-dividend also extra(s); b-annual rate of dividend plus stock dividend; c-quoting dividend, i.e., called; d-yearly; low-a-dividend declared or paid in preceding 12 months; g-dividend in Canadian funds, subject to 19% non-residence tax; h-dividend declared after split-up or stock dividend; i-dividend declared after stock split; j-dividend declared after stock dividend meeting; k-dividend declared or paid this year; an accumulative issue with dividends in arrears; n-new issue in the past 52 weeks; The high-low range begins with the start of trading; o-dividend declared or paid in preceding 12 months; p-dividend declared or paid in preceding 12 months, plus stock dividend; q-a stock split; r-Dividends begin with date of split; s-a sales; r-dividend paid in stock in preceding 12 months; t-estimated cash value on ex-dividend or ex-distribution date; u-new yearly high; v-dividend declared or paid in preceding 12 months; w-organised under the Bankruptcy Act, or securities assumed by such companies; w-when distributed; w-when issued; w-with warrants; x-ex-dividend or ex-rights; x2-a ex-distribution; x3-a ex-dividend; x4-a dividend and sales in full; y-yield; z-sales in full.

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## OVER-THE-COUNTER

Stock	High	Low	High	Low	Stock	High	Low	High	Low
WSE	125	73	73	73	WITA	5	53	123	123
WaldG	319	175	175	175	WorCo	40	63	184	174
Walsh	50	54	54	54	WorCoC	141	141	164	14
Walsh	120	50	50	50	WorCoS	1107	254	25	254
Walsh	406	55	245	245	WorCoT	112	34	34	34
Warrick	50	10	54	54	WorCoU	432	74	74	74
Warrick	50	10	54	54	WorCoV	152	344	344	344
Warrick	50	10	54	54	WorCoW	294	84	84	84
Warrick	50	10	54	54	WorCoX	650	104	104	104
Warrick	50	10	54	54	WorCoY	58	64	64	64
Warrick	50	10	54	54	WorCoZ	21	114	114	114
Warrick	50	10	54	54	WorCoA	57	54	54	54
Warrick	50	10	54	54	WorCoB	40	24	24	24
Warrick	50	10	54	54	WorCoC	30	21	18	18
Warrick	50	10	54	54	WorCoD	30	17	17	17
Warrick	50	10	54	54	WorCoE	58	22	22	22
Warrick	50	10	54	54	WorCoF	80	24	24	24
Warrick	50	10	54	54	WorCoG	80	24	24	24
Warrick	50	10	54	54	WorCoH	80	24	24	24
Warrick	50	10	54	54	WorCoI	80	24	24	24
Warrick	50	10	54	54	WorCoJ	80	24	24	24
Warrick	50	10	54	54	WorCoK	80	24	24	24
Warrick	50	10	54	54	WorCoL	80	24	24	24
Warrick	50	10	54	54	WorCoM	80	24	24	24
Warrick	50	10	54	54	WorCoN	80	24	24	24
Warrick	50	10	54	54	WorCoO	80	24	24	24
Warrick	50	10	54	54	WorCoP	80	24	24	24
Warrick	50	10	54	54	WorCoQ	80	24	24	24
Warrick	50	10	54	54	WorCoR	80	24	24	24
Warrick	50	10	54	54	WorCoS	80	24	24	24
Warrick	50	10	54	54	WorCoT	80	24	24	24
Warrick	50	10	54	54	WorCoU	80	24	24	24
Warrick	50	10	54	54	WorCoV	80	24	24	24
Warrick	50	10	54	54	WorCoW	80	24	24	24
Warrick	50	10	54	54	WorCoX	80	24	24	24
Warrick	50	10	54	54	WorCoY	80	24	24	24
Warrick	50	10	54	54	WorCoZ	80	24	24	24
Warrick	50	10	54	54	WorCoA	80	24	24	24
Warrick	50	10	54	54	WorCoB	80	24	24	24
Warrick	50	10	54	54	WorCoC	80	24	24	24
Warrick	50	10	54	54	WorCoD	80	24	24	24
Warrick	50	10	54	54	WorCoE	80	24	24	24
Warrick	50	10	54	54	WorCoF	80	24	24	24
Warrick	50	10	54	54	WorCoG	80	24	24	24
Warrick	50	10	54	54	WorCoH	80	24	24	24
Warrick	50	10	54	54	WorCoI	80	24	24	24
Warrick	50	10	54	54	WorCoJ	80	24	24	24
Warrick	50	10	54	54	WorCoK	80	24	24	24
Warrick	50	10	54	54	WorCoL	80	24	24	24
Warrick	50	10	54	54	WorCoM	80	24	24	24
Warrick	50	10	54	54	WorCoN	80	24	24	24
Warrick	50	10	54	54	WorCoO	80	24	24	24
Warrick	50	10	54	54	WorCoP	80	24	24	24
Warrick	50	10	54	54	WorCoQ	80	24	24	24
Warrick	50	10	54	54	WorCoR	80	24	24	24
Warrick	50	10	54	54	WorCoS	80	24	24	24
Warrick	50	10	54	54	WorCoT	80	24	24	24
Warrick	50	10	54	54	WorCoU	80	24	24	24
Warrick	50	10	54	54	WorCoV	80	24	24	24
Warrick	50	10	54	54	WorCoW	80	24	24	24
Warrick	50	10	54	54	WorCoX	80	24	24	24
Warrick	50	10	54	54	WorCoY	80	24	24	24
Warrick	50	10	54	54	WorCoZ	80	24	24	24
Warrick	50	10	54	54	WorCoA	80	24	24	24
Warrick	50	10	54	54	WorCoB	80	24	24	24
Warrick	50	10	54	54	WorCoC	80	24	24	24
Warrick	50	10	54	54	WorCoD	80	24	24	24
Warrick	50	10	54	54	WorCoE	80	24	24	24
Warrick	50	10	54	54	WorCoF	80	24	24	24
Warrick	50	10	54	54	WorCoG	80	24	24	24
Warrick	50	10	54	54	WorCoH	80	24	24	24
Warrick	50	10	54	54	WorCoI	80	24	24	24
Warrick	50	10	54	54	WorCoJ	80	24	24	24
Warrick	50	10	54	54	WorCoK	80	24	24	24
Warrick	50	10	54	54	WorCoL	80	24	24	24
Warrick	50	10	54	54	WorCoM	80	24	24	24
Warrick	50	10	54	54	WorCoN	80	24	24	24
Warrick	50	10	54	54	WorCoO	80	24	24	24
Warrick	50	10	54	54	WorCoP	80	24	24	24
Warrick	50	10	54	54	WorCoQ	80	24	24	24
Warrick	50	10	54	54	WorCoR	80	24	24	24
Warrick	50	10	54	54	WorCoS	80	24	24	24
Warrick	50	10	54	54	WorCoT	80	24	24	24
Warrick	50	10	54	54	WorCoU	80	24	24	24
Warrick	50	10	54	54	WorCoV	80	24	24	24
Warrick	50	10	54	54	WorCoW	80	24	24	24
Warrick	50	10	54	54	WorCoX	80	24	24	24
Warrick	50	10	54	54	WorCoY	80	24	24	24
Warrick	50	10	54	54	WorCoZ	80	24	24	24
Warrick	50	10	54	54	WorCoA	80	24	24	24
Warrick	50	10	54	54	WorCoB	80	24	24	24
Warrick	50	10	54	54	WorCoC	80	24	24	24
Warrick	50	10	54	54	WorCoD	80	24	24	24
Warrick	50	10	54	54	WorCoE	80	24	24	24
Warrick	50	10	54	54	WorCoF	80	24	24	24
Warrick	50	10	54	54	WorCoG	80	24	24	24
Warrick	50	10	54	54	WorCoH	80	24	24	24
Warrick	50	10	54	54	WorCoI	80	24	24	24
Warrick	50	10	54	54	WorCoJ	80	24	24	24
Warrick	50	10	54	54	WorCoK	80	24	24	24
Warrick	50	10	54	54	WorCoL	80	24	24	24
Warrick	50	10	54	54	WorCoM	80	24	24	24
Warrick	50	10	54	54	WorCoN	80	24	24	24
Warrick	50	10	54	54	WorCoO	80	24	24	24
Warrick	50	10	54	54	WorCoP	80	24	24	24
Warrick	50	10	54	54	WorCoQ	80	24	24	24
Warrick	50	10	54	54	WorCoR	80	24	24	24
Warrick	50	10	54	54	WorCoS	80	24	24	24
Warrick	50	10	54	54	WorCoT	80	24	24	24
Warrick	50	10	54	54	WorCoU	80	24	24	24
Warrick	50	10	54	54	WorCoV	80	24	24	24
Warrick	50	10	54	54	WorCoW	80	24	24	24
Warrick	50	10	54	54	WorCoX	80	24	24	24
Warrick	50	10	54	54	WorCoY	80	24	24	24
Warrick	50	10	54	54	WorCoZ	80	24	24	24
Warrick	50	10	54	54	WorCoA	80	24	24	24
Warrick	50	10	54	54	WorCoB	80	24	24	24
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Warrick	50	10	54	54	WorCoD	80	24	24	24
Warrick	50	10	54	54	WorCoE	80	24	24	24
Warrick	50	10	54	54	WorCoF	80	24	24	24
Warrick	50	10	54	54	WorCoG	80	24	24	24
Warrick	50	10	54	54	WorCoH	80	24	24	24
Warrick	50	10	54	54	WorCoI	80	24	24	24
Warrick	50	10	54	54	WorCoJ	80	24	24	24
Warrick	50	10	54	54	WorCoK	80	24	24	24
Warrick	50	10	54	54	WorCoL	80	24	24	24
Warrick	50	10	54	54	WorCoM	80	24	24	24
Warrick	50	10	54	54	WorCoN	80	24	24	24
Warrick	50	10	54	54	WorCoO	80	24	24	24
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Warrick	50	10	54	54	WorCoA	80	24	24	24
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Warrick	50	10	54	54	WorCoF	80	24	24	24
Warrick	50	10	54	54	WorCoG	80	24	24	24
Warrick	50	10	54	54	WorCoH	80	24	24	24
Warrick	50	10	54	54	WorCoI	80	24	24	24
Warrick	50	10	54	54	WorCoJ	80	24	24	24
Warrick	50	10	54	54	WorCoK	80	24	24	24
Warrick	50	10	54	54	WorCoL	80	24	24	24
Warrick	50	10	54	54	WorCoM	80	24	24	24
Warrick	50	10	54	54	WorCoN	80	24	24	24
Warrick	50	10							

appears as a matter of record only

December 1984

**25,000,000**  
**ZEALAND FINANCE B.V.**  
*(incorporated in the Netherlands)*  
**Fixed Bonds Due 1991**  
issued (on a joint and several basis) by  
**Zealand Finance B.V. & Co. Limited**  
and  
**Zealand Finance (UK) Limited**  
*(incorporated in New Zealand)*

**BUNGENER (OVERSEAS) LIMITED**

**HAMBROS BANK LIMITED**  
**NIPPON KANGYO KAKUMARU (EUROPE) LIMITED**

**National Australia Bank**

MANUFACTURERS HANOVER LIMITED  
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**You're going to like us**





## Bank Accounts

[illegible][illegible]



[illegible]



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**HOARE GOVETT**  
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### Reed International P.L.C. Unsecured Loan Notes 1985

first issued in July 1980 to electing shareholders in London & Provincial  
Poster Group Limited

Notice is hereby given that the annual rate of interest payable in respect of the Unsecured Loan Notes 1985 for the six months Interest Period from 1 January 1985 to 30 June 1985 shall be 6.1875% per annum. The relevant Interest Payment Date will be 30 June 1985.

Any Loan Notes not previously repaid will be repaid at par on 30 June 1985.

### FOREIGN BANKS IN NEW YORK

The Banker in the March issue will be publishing its annual study on the expansion of New York as an international banking centre. The study will again include the full listing of every foreign banking operation—Branch, Agency, Representative Office or Subsidiary—active at the end of 1984. Location, management, staffing and assets are detailed in full.

Banks, Financial Institutions and Suppliers to the Banking Industry wishing to demonstrate their commitment to New York's international banking expansion by advertising in this important study should contact:

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**ENTE NAZIONALE  
PER L'ENERGIA ELETTRICA  
(ENEL)**  
U.S. \$100,000,000  
Floating Rate Debentures due 1989  
Convertible at the holders' option into  
13% Fixed Rate Debentures due 1992  
Guaranteed by the Republic of Italy

In accordance with the provisions of the Debentures, notice is hereby given that for the six month Interest Period from 7th January 1985 to 6th July 1985, the Debentures will carry an Interest Rate of 9 1/8% per annum and that the interest payable on the relevant Interest Payment Date, 6th July 1985 against Coupon No. 6 will be U.S. \$499.76.

**The Sumitomo Bank, Limited**  
Agent Bank

# CURRENCIES, MONEY and CAPITAL MARKETS

## FINANCIAL FUTURES

### LONDON

THREE-MONTH EURO-DOLLAR  
5m points of 100

	Close	High	Low	Prev
March	90.60	90.64	90.57	90.56
June	90.00	90.05	89.96	89.95
Sept	89.65	89.72	89.64	89.64
Dec	89.05	89.07	89.05	89.01
March	89.59	—	—	89.55

Est. volume 3,858 (4,257)  
Previous day's open int. 10,116 (10,092)

THREE-MONTH STERLING  
£250,000 points of 100

	Close	High	Low	Prev
March	89.43	89.56	89.37	89.47
June	89.36	89.54	89.36	89.42
Sept	89.33	89.50	89.33	89.40
Dec	89.21	89.34	89.21	89.20
March	89.04	89.06	89.03	89.20

Est. volume 1,504 (1,988)  
Previous day's open int. 5,518 (5,415)

20-YEAR 13% NATIONAL GILT  
150,000 points of 100

	Close	High	Low	Prev
March	105.17	105.05	105.16	105.20
June	104.91	105.02	104.82	104.91
Sept	104.72	104.81	104.71	104.71
Dec	104.51	104.60	104.50	104.51
March	104.28	104.37	104.27	104.28

Est. volume 2,300 (3,190)  
Previous day's open int. 4,144 (3,956)

Base quote (clean cash price of 1%  
Treasury 2000 lease equivalent price of  
near futures contract) 70 to 20 (32nd)

STERLING £25,000 \$ per £

	Close	High	Low	Prev
March	1.1488	1.1495	1.1480	1.1488
June	1.1488	1.1495	1.1480	1.1488
Sept	1.1488	1.1495	1.1480	1.1488
Dec	1.1488	1.1495	1.1480	1.1488
March	1.1488	1.1495	1.1480	1.1488

Est. volume 400 (56)  
Previous day's open int. 4,508 (4,521)

DEUTSCHE MARKS  
DM 125,000 \$ per DM

	Close	High	Low	Prev
March	0.3178	0.3185	0.3174	0.3178
June	0.3178	0.3185	0.3174	0.3178
Sept	0.3178	0.3185	0.3174	0.3178
Dec	0.3178	0.3185	0.3174	0.3178
March	0.3178	0.3185	0.3174	0.3178

Est. volume 150 (210)  
Previous day's open int. 110 (115)

Y-SE 100 INDEX  
25 per full index point

	Close	High	Low	Prev
March	121.40	121.75	121.50	121.40
June	121.40	121.75	121.50	121.40
Sept	121.40	121.75	121.50	121.40
Dec	121.40	121.75	121.50	121.40
March	121.40	121.75	121.50	121.40

Est. volume 150 (233)  
Previous day's open int. 794 (793)

U.S. TREASURY BONDS  
8% \$100,000 32nds of 100

	Close	High	Low	Prev
March	91.72	91.82	91.72	91.72
June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

Est. volume 543 (1,500)  
Previous day's open int. 1,347 (1,243)

CHICAGO

U.S. TREASURY BONDS (CBT)  
8% \$100,000 32nds of 100

	Close	High	Low	Prev
March	91.72	91.82	91.72	91.72
June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

Est. volume 543 (1,500)  
Previous day's open int. 1,347 (1,243)

U.S. TREASURY BONDS (CBT)  
8% \$100,000 32nds of 100

	Close	High	Low	Prev
March	91.72	91.82	91.72	91.72
June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

Est. volume 543 (1,500)  
Previous day's open int. 1,347 (1,243)

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8% \$100,000 32nds of 100

	Close	High	Low	Prev
March	91.72	91.82	91.72	91.72
June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

Est. volume 543 (1,500)  
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Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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	Close	High	Low	Prev
March	91.72	91.82	91.72	91.72
June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

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	Close	High	Low	Prev
March	91.72	91.82	91.72	91.72
June	91.72	91.82	91.72	91.72
Sept	91.72	91.82	91.72	91.72
Dec	91.72	91.82	91.72	91.72
March	91.72	91.82	91.72	91.72

Est. volume 543 (1,500)  
Previous day's open int. 1,347 (1,243)

U.S. TREASURY BONDS (CBT)  
8% \$100,000 32nds of 100

Est. volume 543 (1,500)  
Previous day's open int. 1,347 (1,243)

## Something very familiar

BY COLIN MILLHAM

There is more than slight feeling of deja vu about the present situation on the foreign exchange. The New Year has begun in the same way as 1984, with the dollar rising to record levels against other major currencies.

Firm U.S. interest rates remain a major factor keeping the dollar in demand, although currency levels are slightly below those of 12 months ago, with bank prime rates at 10 1/2 per cent against 11 per cent and Federal funds in New York at highest for 12 years of around 8 1/2 per cent compared with 9 1/2 per cent. The Federal Reserve's discount rate is now 8 per cent, while in January last year it was 10 per cent.

Tension in the Middle East also tended to support the dollar at the beginning of 1984, as the war between Iran and Iraq and

# FINANCIAL TIMES SURVEY

## United Arab Emirates

Faced with the need to gain a consensus of opinion from its seven ruling families, the United Arab Emirates is finding it difficult to take resolute action to tackle the effects of the recession

### Period of confused internal affairs

by Michael Field

THE UNITED ARAB EMIRATES gives the impression of being hurt worse by the oil glut than the other Arabian peninsula producers. Its problem is not that it is desperately short of money—on the contrary it is still extremely rich—but that it is a federation in which the central authority is not yet strong.

The rulers of the UAE, therefore, find it even harder than the rulers of the other oil producers to take resolute action to tackle the effects of the recession.

The UAE's economic difficulties are manifold and very visible. In the last two years this federal budget, which is supposed to run from January to December, has only been approved by the emirate governments in mid-summer after unseemly wrangling between the two rich members of the federation, Abu Dhabi and Dubai.

In both leading emirates and especially in Abu Dhabi, the award of new contracts has

stopped. For this time being in Abu Dhabi, the economy is being made reasonably buoyant by a few big buildings under construction, the Government's major storm water and sewerage scheme, and the oil companies' spending of about US\$5m a day on enhanced recovery systems on their oil fields.

All of these operations keep money flowing into the private sector, but it is feared that when some of them are finished next year business will be very quiet.

Trading companies in the UAE as a whole report volumes of sales down by 30 to 50 per cent in the last two years, and their profit margins trimmed much more drastically. Contractors and suppliers complain of late payments, which the Government admits.

Many small trading companies have ceased to operate, though few have actually gone into liquidation. As a banker remarked recently, "companies in the UAE are like old

soldiers, since there is no bankruptcy law they just fade away rather than go bust."

Several of the banks are in the same position. There are two or three institutions which in the West would have been declared insolvent weeks ago but among the banking fraternity of the UAE are regarded as "living dead."

In reality the UAE economy is not in as bad a state as it looks. "There is a lot of money about, but nobody seems to have any," is how a senior Western manager in the country put it recently.

Dubai is still producing as much oil as it can—350,000 barrels a day—though the price it is getting on the spot market must be lower than they were a few years ago. Abu Dhabi at present should be producing no more than 600,000 b/d if it is to allow for Dubai's production in the UAE's Opec quota of 950,000 b/d. But in practice the state is thought to be producing about 750,000 b/d,

which is well above the level it was producing in the summer.

If these levels of output and current Opec prices are maintained, during the next 12 months, the UAE will earn at least \$10bn from oil and at least \$2bn from gas sales and foreign investments. A total income of \$12bn is hardly inadequate for a state with a population of only 1m.

The reason why this affluent state appears to be financially embarrassed is that it is not using its resources efficiently, as even the most senior members of the Government readily admit.

At a federal level, contractors, government employees and landlords letting property to the Government would have been paid on time if the federal budget had been approved at the beginning of the year and if then, the federal finance ministry had received the funds due to it from Abu Dhabi and Dubai on time.

The federal government, like the Abu Dhabi government, has vigorously and effectively cut its current spending by reducing the number of its employees, which means automatically making economies in rents, car allowances, and air tickets for expatriates.

It has also made a start to reducing subsidies and the scale of the welfare state, by raising petrol prices and pushing foreign children into the private schooling system. But however stringent its economies, they cannot compensate for the government receiving its income late.

To tackle these problems, the president of the federation, Shaikh Zayed bin Sultan al Nahayyan, last month ordered the establishment of a committee of members of the federal cabinet and the federal national council, the state's advisory parliament.

The committee's brief extends to anything related to the recession, including differences between Abu Dhabi and Dubai in

the interpretation of commercial legislation and the lack of bankruptcy law, which has made it virtually impossible for creditors to lay their hands on debtors' assets.

Whether the committee will radically change the situation will depend on who will head it and how much support it will be given by the Abu Dhabi and Dubai governments. Most probably it will have only a moderate impact.

The real underlying problem is that it has always been difficult for the UAE governments to tackle sensitive issues because it has to obtain the consensus of seven ruling families. And this structural shortcoming has been accentuated in the past three years by the lack of a prime minister at the head of the federal government.

Shaikh Rashid bin Said al Maktoum, the ruler of Dubai, who agreed to become prime minister of the federation in 1979, has been seriously ill and politically inactive since early

1983. As he is still alive the Arab sense of respect for the distinguished old dictates that he should not be replaced.

Neither of Shaikh Rashid's two deputies, his eldest son, Maktoum, and Shaikh Hamdan bin Mohammed of Abu Dhabi, are politically energetic men. Consequently federal affairs have tended to drift.

There has not only been confusion over the budget and a failure to introduce necessary new legislation. Several border disputes between emirates have remained unresolved. The government has failed to take action to improve the security of its diplomats abroad, several of whom have been assassinated or injured by Palestine extremists.

Ever since the UAE was established in December 1971 it has been a maxim of its politics that the federal government is strong when Abu Dhabi and Dubai work closely together.

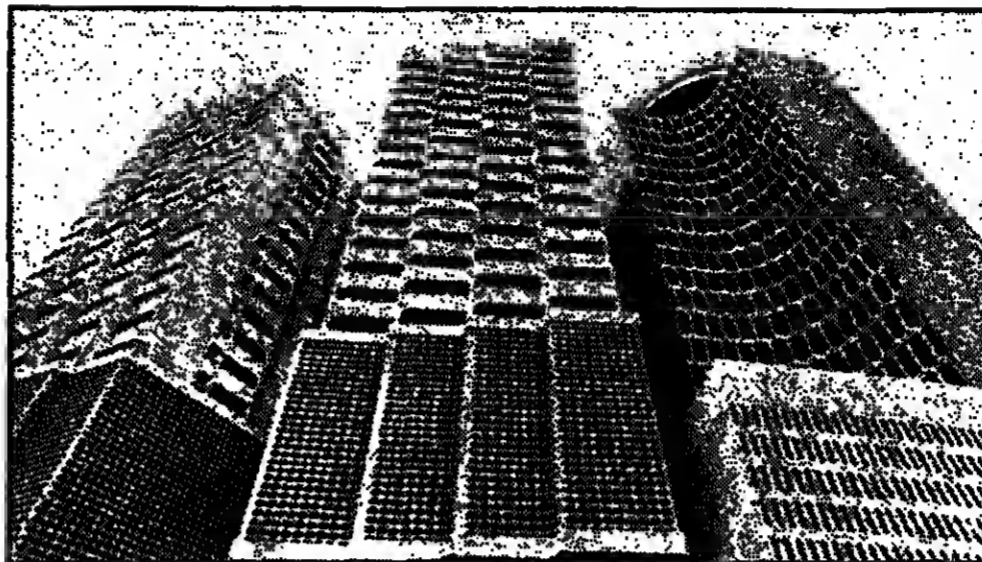
When Shaikh Rashid was well he worked intermittently

with Abu Dhabi. Now that his four sons run the state in his stead, the co-operation has been interrupted.

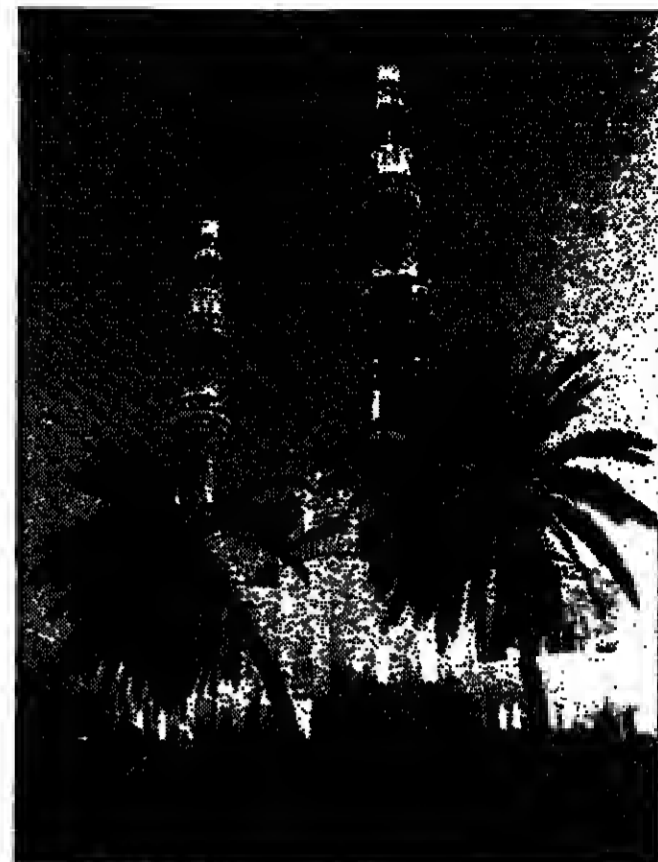
This is partly because they and their followers are preoccupied with domestic political uncertainties. These stem from the fact that the Shaikh's eldest son, Maktoum, will succeed but will probably not be the effective ruler. At the same time none of the sons is federally minded. They are reluctant to contribute more than they need to the federal budget allocation, and see no necessity to pay any money at all towards the federal deficit.

Until something changes in Dubai, it seems likely that federal authority will continue to go through a weak period and the internal affairs of the UAE will remain confused.

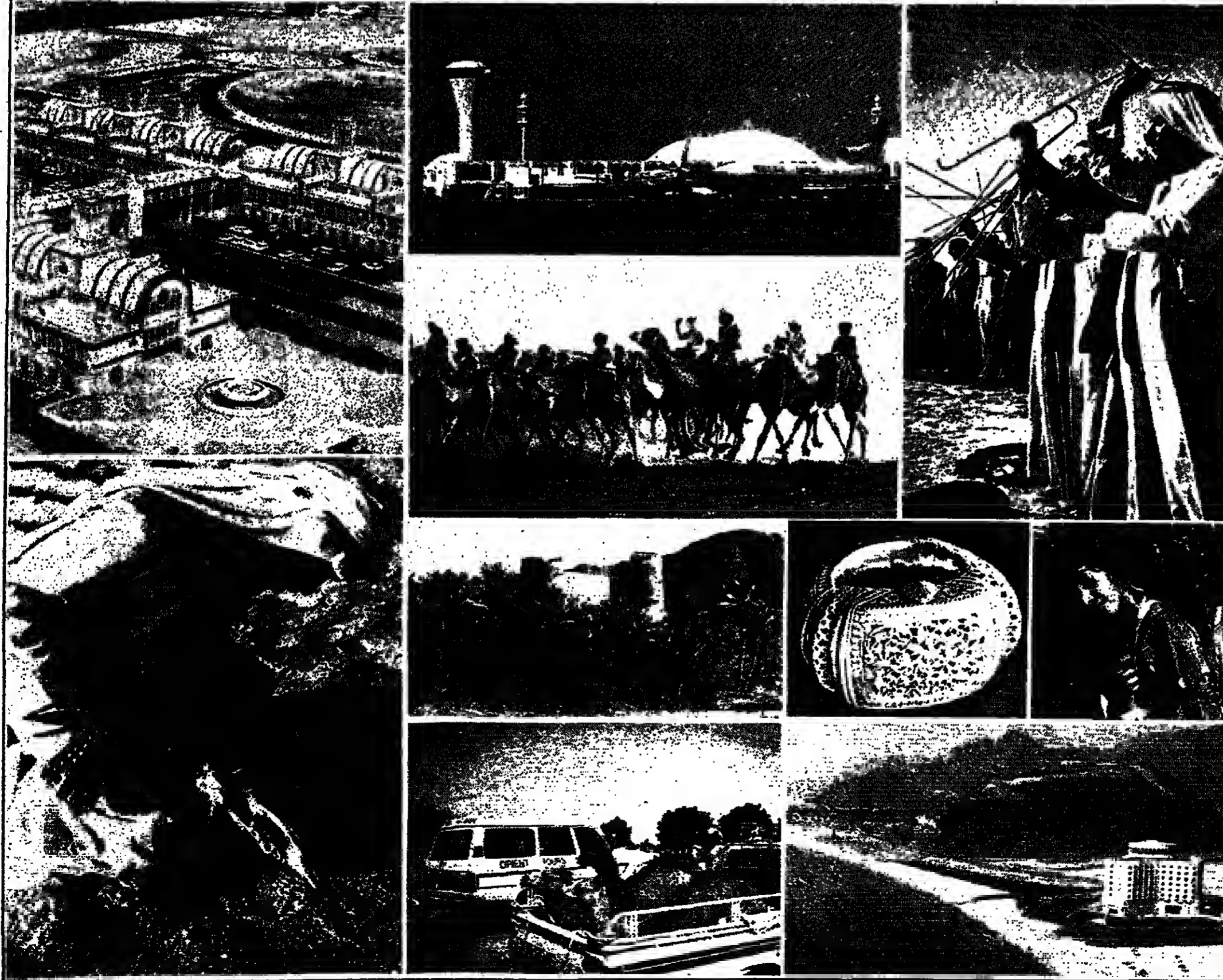
This is unfortunate, but given the past history of the UAE it is something to which most citizens are resigned. It certainly does not represent a crisis in the state's affairs.



Striking lines of the Deira Towers (left) in the UAE contrast with the more traditional lines of the new mosque (right) recently built for Shaikh Rashid of Dubai. Pictures for this survey by Terry Kirk.



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## United Arab Emirates 2

## Downturn shows no sign of abating

Economy  
KATHY EVANS

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THE DOWNTURN in the UAE economy which began in 1981 as the world oil market softened, shows no sign of abating. Local businessmen say somewhat pessimistically that the worst may be yet to come, and they are predicting a rash of individual bankruptcies and difficulties with the banks.

Such statements may seem alarmist given the substantial wealth of the country's economy. Oil-based, with considerable foreign reserves and no foreign debt, the country's economy would seem to be in an enviable position. However, the UAE's underlying vulnerability lies in its reliance on oil and gas for the major part of its revenues, and here the future could look rocky indeed.

Abu Dhabi, the capital emirate, used to produce about two-thirds of the country's oil output, but now faces a difficult market. Its light Murban crude has proved difficult to sell in the last 18 months, and the state's overall production showed a decline during 1984 from around 800,000 b/d to around 600,000 b/d or even less during the summer and autumn periods.

The successful conclusion of

negotiations with the equity partners and a discount totalling around 45 cents to direct buyers in mid-October, boosted Abu Dhabi's production in the last months of the year, but as 1985 opens, the emirate remains under severe pressure from its oil customers.

Unless sympathy is shown for Abu Dhabi's situation by Saudi Arabia and Kuwait (both producers of heavy and medium crudes), the emirate's oil output could fall even further—until such time as a price cut is agreed on which satisfies the market.

The oil minister, Dr Mana Saeed al Otaibi has already threatened unilateral price cuts "with minimum violation" of the Organisation of Petroleum Exporting Countries. Even the emirate's oil customers point out that Abu Dhabi's problems stem largely from its loyalty to Opec, for other producers, including neighbouring Dubai, have resorted to spot market prices to maintain output—or provided large, under the table discounts. Either way, Abu Dhabi's revenues can be expected to decline, unless oil demand picks up.

It is Abu Dhabi's oil revenues which determine the climate of business activity in the country, for the emirate provides more than two-thirds of the federal budget each year. Second, its own budget of Dh 21.7bn is larger than all other federal and emirate budgets put to-

gether. Any further closing of the oil revenue tap, and the country's economic difficulties will be compounded.

Already, the country has had to endure a virtual halving of its oil revenues between the years 1981-83. During 1983 the federal government was able to trim its expected deficit from Dh 5.5bn to an actual figure of Dh 4.4bn. However, Abu Dhabi had to fund the deficit that remained, and its own budget deficit went up from a projected figure of Dh 2.9bn to Dh 3.75bn by the year-end of 1983.

In 1984 the budget was published only in July, and finance ministry figures show that there is to be a further trimming of the deficit to Dh 4.3bn—a 20 per cent drop below the projected figure for the previous year. However, it is likely that the same pattern will emerge.

Abu Dhabi will have to provide lump sums so that the federal ministries can get through the year. The impact of such deficits has been dramatic. Ras al Khaimah is reported to suffer severe power shortages because the federal finance ministry withholds payments to Emirates General Petroleum Corporation which feeds the emirate with fuel oil. The thousands of teachers and other civil servants go unpaid for weeks on end, the workforce continues to dwindle, and imports have fallen by about 20 per cent in the past year. But the most painful way the federal government has had to resort to financing its deficit is to delay payment to contractors and suppliers.

## Unbalanced

Merchants with good connections are likely to follow. Local businessmen are already arguing that all debts, even those in dispute, should be settled. During the peak of the boom when the race to develop was on, contractors frequently found themselves in dispute with government consultants over specifications and designs. Even the location of a project was frequently changed.

Working on a fixed price contract, it was usually the contractor who picked up the bill at the end, or remained unpaid while the arguments continued. Already, merchants are reminding themselves how they had "the good old days" were.

Such sentiments will play a significant role as the Government approaches the creation and implementation of a bankruptcy law. As local businessmen already argue, you cannot displace a merchant and seize all his assets, when it may not have been his fault in the

and back-up in any future moves.

At the instruction of President Sheikh Zayed, the council has been requested to form a seven-man committee to investigate the country's economic ills together with members of the cabinet. The FNC members on the committee include leading businessmen from both Dubai and Abu Dhabi, and their report is expected within the next few months.

The move by Sheikh Zayed has been greeted with a degree of cynicism from the banks. ("When they have a problem, they form a committee" to use the words of one banker) but nevertheless local financial institutions concede that it represents at least the first formal recognition by the Government that there are serious economic problems. The minimum expectation is that at the very least, the formation of the committee could assist the clearing of the backlog of debts.

Over the past few months, there have been various pronouncements from the Government that the president is about to earmark Dh 2bn for payments to contractors and suppliers. Little has happened since, and subsequent government statements suggest that the amount may in fact be much smaller, from Dh 700m to Dh 1bn.

The next question which will inevitably arise is who are to be the beneficiaries of this delayed disbursement. Priority is likely to be given to those suppliers still engaged in work for the Government, so that current work can be completed without further liquidity problems.

Business circles believe that many companies will be closed down, allowing owners to concentrate on the few profitable ventures. The problem is that the banks are still carrying the can for the other companies. It is at this point that the arguments for a boost in public spending can be heard the loudest, for merchants argue that if rents are to hold up, and consumer demand be established then the population and the climate of business activity must be maintained. However, with declining funds being earned from oil, it is difficult to see how this can be maintained, let alone boosted.

Abu Dhabi businessmen are already arguing that the Government should resort to borrowing on the international market. Bankers concede that it would be the height of folly to initiate a national debt merely in order to sustain the fantasies and needs of local

first place. A post-mortem on the Government's previous neglect in controlling the economy during the boom days would appear to be in the offing.

Among the issues likely to be raised are the lack of bank supervision, the fixed price contracts which caused cut throat competition and suicide prices, and the recent delay in payments. All this, they say, has contributed to the boom and bust phenomena which the Emirate is experiencing.

Alarmingly, this re-examination of past events and accusations of neglect have already led to suggestions that it is for the Government to bail out those merchants in difficulties. Among the suggestions which are emerging include 20-year loans at soft terms, and a cut-back on interest being charged by the banks.

Clearly, the transition from a cotton wool existence to a semblance of reality is not going to be easy. After all, other Gulf states have bailed out their merchants, and to do otherwise in the UAE may prove somewhat traumatic for the private sector.

## Consumer demand

Not all the difficulties being experienced by local trading companies can be blamed on delayed payments from the Government, for most relied on a general rise in prosperity and growing consumer demand.

Present thinking of some members of the FNC committee on companies which fall into this category is that if these concerns were clearly over-trading and ill-managed, then they must suffer the normal consequences—bankruptcy. Business circles believe that many companies will be closed down, allowing owners to concentrate on the few profitable ventures. The problem is that the banks are still carrying the can for the other companies.

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Abu Dhabi businessmen are already arguing that the Government should resort to borrowing on the international market. Bankers concede that it would be the height of folly to initiate a national debt merely in order to sustain the fantasies and needs of local

businessmen. Until now, the Government has resisted the pressure to relax the economy, and has, instead, sought to live within its means. Officials and bankers alike point out that if there are any further injections of funds into the economy they are likely to end up outside the country anyway.

This can be clearly seen in the rise of foreign assets of the commercial banks which went up from Dh 35bn at the end of 1983 to Dh 59.6bn by the middle of last year. This reflects the lack of investment opportunities within the country.

The Government therefore has to find ways to curtail its own spending to more modest income levels, without affecting the level of business activity internally. The current expenditure budget would seem the most obvious target, as it already forms the bulk of all budgets.

Defence is another area which is already coming under scrutiny, but this has yet to materialise into lower budgets. Defence is presently absorbing 50 per cent of the federal budget.

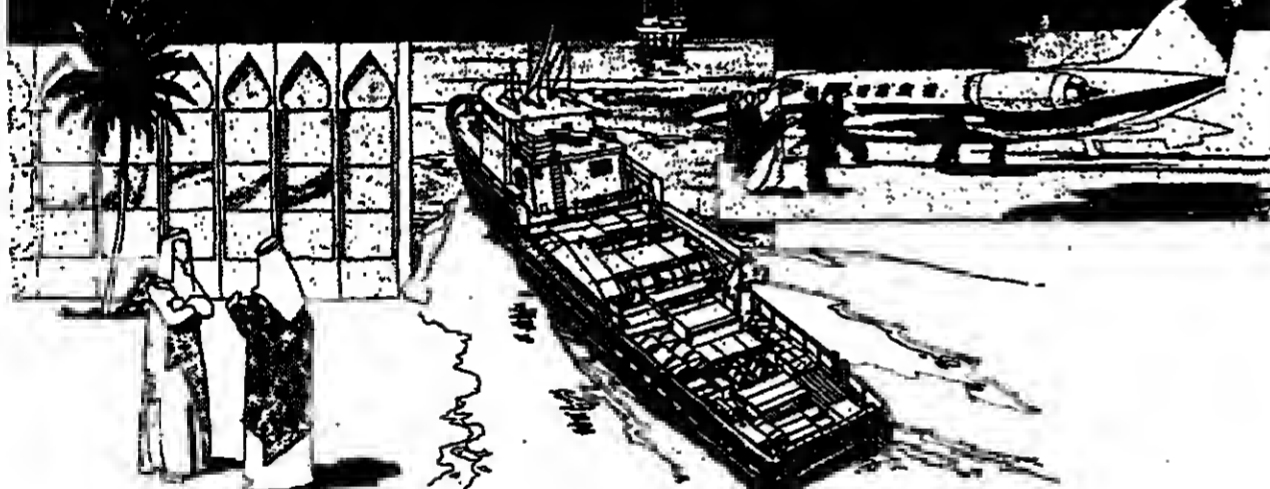
Cutting the current expenditure could be difficult, for the two main expenses, wages and electricity subsidies, would prove the most sensitive areas to prune. Cutting the number of civil servants would lead to a downward spiral in rents and consumer demand. Electricity subsidies involve the delicate area of Abu Dhabi's relations with other emirates.

Industry, too, is reliant on cheap power tariffs. However, the Government has other considerations to bear in mind. A tax in the population would seem to be necessary on internal security grounds alone. Yet such factors are emerging as the business community is beginning to realise just how competitive they are on a large expatriate community.

Politically too, there are other factors at play. While the federal government remains starved of funds, the result is a weakening of the structure. Now that the federal authorities can no longer dispense the largesse and subsidies which its unifying role has been undermined.

Overall, the UAE has to do some deep thinking about itself and its economy. With less money coming in, the economy must inevitably shrink—unless that is, the Government chooses to maintain a fairytale economy for its own political reasons.

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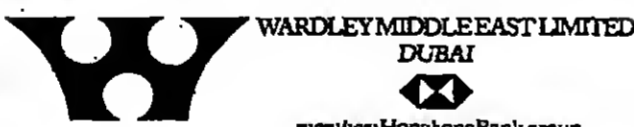
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## Heavy expenditure on force which also plays unifying role

Defence  
KATHY EVANS

THIS HAS BEEN a bad year for security in the Gulf. Attacks on ships in the region have become almost a weekly affair, and the "tanker war" has heightened fears that the conflict in the north will spread to the Gulf area.

Until now it has been Kuwait, with its proximity to southern Iraq, which has featured most heavily in incidents, but Saudi Arabia has also been engaged in the shooting down of Iranian planes over its territorial waters.

While the involvement of other Gulf states in the war has been growing, the UAE has remained relatively safe from attack.

Its location in the south of the Gulf is well away from the designated war zones of Iran and Iraq, and its Iranian "connection" has made for an unspoken veil of immunity.

On the one hand, Abu Dhabi continues to provide funds to fuel the Iraqi war effort (albeit on a reduced scale), while on the other its relations with Tehran are the best in the Gulf.

The trading connections through Dubai ensure a regular contact with the Iranian Government, and at the diplomatic level, the UAE is the only country in the region to maintain relations with Iran at ambassadorial level.

In addition, there are frequent high-level visits by senior military and foreign ministry officials from Tehran to the Emirates; and regular mention is made of the president, Sheikh Zayed, being the most appropriate Gulf leader to head any CCC (Gulf Co-operation Council) mission to the Islamic Republic.

Despite this, the UAE maintains one of the largest armies per percentage of the population in the world. Its armed forces total around 43,000 out of a population of some 1.2m. Defence is the largest single item on the UAE budget, with 1984's allocation officially standing at around Dh 6.8bn (\$1.8bn) out of a total budget of Dh 17bn.

Unofficial estimates say that the year's defence expenditure may rise to around Dh 8bn. Despite the size of forces, however, and the money lavished on them, few military experts expect them to play more than a holding role in the event of

any attack on the country—providing sufficient time to alert other forces in the area.

The figures can be deceptive though, for military experts believe that only about half of UAE's armed forces are combat ready troops, the rest being administrative and support staff. Moreover, the UAE army also has many other "jobs" in the country. It acts as a mechanism for the oil wealth around to nationals outside the urban areas and it provides education to citizens who were not absorbed by the national education system.

It is a force very much dominated by foreigners, for it has to compete for nationals with the police and the private sector. About 60 per cent of the forces are actually Omanis, and in addition, there are a number of Sudanese, Pakistani, Egyptian, Jordanian and British personnel.

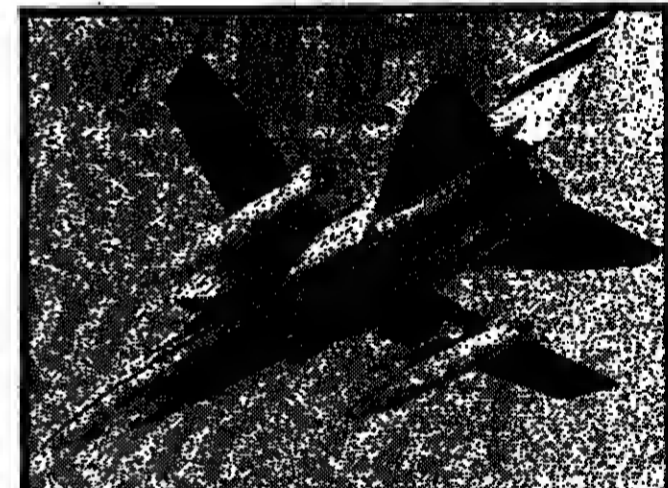
Nationals dominate the officer ranks, but there are few below the level of Sergeant Major. And it is very much a part-time army. Most nationals in the ranks run their businesses in the afternoon, and Omanis take every Thursday off to drive home to Muscat for the weekend.

But perhaps the most important role of the UAE armed forces is to play a part in a unifying force internally. This ambition has to be carefully balanced between the desire of each ruler to maintain his own security in his emirate, and therefore major decisions are channelled through the ruling sheikhs first.

Officially, the UAE army consists of three commands. Western, Central and Northern, which in practice works out as Ras al Khaimah, Dubai and Ras al Khaimah, respectively. Central headquarters are in Abu Dhabi. Co-operation does go on at a certain level though. For example, if Ras al Khaimah wants to send personnel for training, then Abu Dhabi, as the headquarters, would pay for it.

On the other hand, all major decisions would be taken by the ruler's second son, Sheikh Sultan bin Saqr, designated commander of the Northern command.

In other areas, the federal system breaks down into the two main forces, Dubai and Abu Dhabi. The Dubai government pays the wages of its own forces, and has chosen to build its own military academy rather than send its men to the new school in Al Ain, Abu Dhabi.



Supplier nations are awaiting the outcome of the UAE's deliberations over the ordering of new military aircraft. The French have been working hard to secure a repeat order for 18 Mirage 2000s, while British hopes are pinned on the Tornado (pictured above). The general consensus, however, is that the French will again prove successful in obtaining an order.

Both forces order their equipment individually, though formal recognition of the federal structure may be given on the actual purchasing orders.

These minor symptoms of disunity, which have not proved important in the past, have become more significant as the UAE is called on to cooperate more with the other armed forces of the Gulf Cooperation Council.

Until now, it has only been Abu Dhabi's armed forces which have participated in the various joint manoeuvres mounted under the Peninsular Shield programme of joint exercises. If the UAE central command wants to involve troops from Ras al Khaimah, then this would have to be negotiated in advance with the ruler.

"It's just politically quicker and administratively easier to use the troops from one force—Abu Dhabi," commented one expert.

Such factors are likely to affect the UAE's involvement in the planned Gulf rapid deployment force (RDF), which was proposed at the recent fifth summit of the GCC. Most military observers believe that the UAE will send a number of troops who have participated in the joint exercises, to be their contribution to the RDF.

Given that there has been no long history of joint manoeuvres between the various regional commands within the UAE, the country is likely to continue using troops from one force in future joint exercises with the GCC armies.

The need for real cohesion between the regional commands of the UAE will become greater as the GCC armies coordinate more. The planned future purchases of the Emirates would indicate that a national defence strategy has to be drawn up. At

the moment, the country has no national navy or air defence early warning system which covers the whole state.

The proposed air defence system has sparked off intense competition between supplier nations. Britain is said to be pushing the AR3D system, the French are selling the Thompson CSF equipment which has been so successful in Saudi Arabia and Kuwait. Other offers have come from West Germany and the U.S.

The tanker war in the Gulf has given fresh impetus to the order, and a decision is expected to be made within the next six months. There is also a great deal of excitement and suppliers in regard to the order of two patrol boats for Abu Dhabi.

Supplier nations are likewise awaiting the outcome of the deliberations about the order of new aircraft. The French are working overtime for a repeat order of 18 Mirage 2000s. French officials decline to comment on whether the deal will contain an element of barter, involving crude oil, and only remark that the deal is an extremely "complicated" one.

Britain meantime is hoping that the Tornado will attract attention, while the U.S. is too hampered by Congress for the UAE to consider the American alternatives, the F-15, F-16 or F-18. The general consensus is that the French will again prove successful.

Next year or so will see greater scrutiny over the defence budgets, and already military suppliers say they see evidence of this.

An order for tanks to replace AMX-30 was thought to be on the cards, but now has been quietly shelved. Missiles are the next item on the order book, though that order may be rolled into the aircraft deal which may involve barter.

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## HIGHLIGHTS - 1983

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## United Arab Emirates 3

# Key to system lies in nature of ownership

**Banking**  
MAGGIE FORD

"IN one separate case the management of one bank failed to face its obligations... despite the direct and serious warnings sent to it by the Central Bank continuously. In order to stop the crisis of this bank from spreading over the banking system, to preserve the good reputation of this system, to protect the interest of the depositors in this bank and its clients and to avoid any economic side effects which would probably worsen during this year, the Central Bank offered assistance to this bank according to the provisions of the Central Bank Act."

In mid-November 1983 the management of the bank was changed. The new management undertook to meet all the obligations of the bank. The Government of Dubai also undertook to guarantee part of those aids offered by the Central Bank. —UAE Central Bank report 1983.

The above passage is the only reference in the Central Bank's report to the collapse and subsequent rescue of the Union Bank of the Middle East (UBME), owned by Mr Abdul Wahab Galadari, a leading Dubai merchant. It describes (if you know to what it is referring) perhaps the most difficult and potentially damaging crisis the UAE financial and economic system has seen for many years.

Decoded, the passage might read like this:

Despite being warned about the loans it had out to its chairman, UBME failed to do anything about it. To stop it from collapsing and to preserve the reputation of Dubai and the interests of depositors, the Central Bank dismissed the management, took over the main

assets of the bank in collaboration with the chairman's brothers, and installed a committee, headed by the UAE Finance Minister, to run the bank. The ruling Maktoum family provided guarantees that the bank, and the brothers' bank would not be allowed to fail.

The cost of this exercise to the Central Bank was approximately Dh1.3bn (\$327m) and the ramifications of the exercise are still being felt in Dubai.

Such is the nature of the banking system, however, that just because a bank is in trouble does not mean that it will fail, and a bank which appears a little shaky may in fact be as safe as houses.

The key to the system is personalities, family relationships and influence with rulers. To judge the position of a bank, it may be wise to inspect not only its accounts but the nature of its ownership and board membership. For there have already been further banks in difficulty in the UAE and it is not by any means certain that ruling families will always step in to help.

## Lower profits

Part of the problem is the number of banks. A total of 102 banks, 56 of them local, operate in this country at 1.3m people. They have a total of 284 branches. The management costs and the lack of central control which ensues from so many banks chasing a decreasing amount of business during the recession is now showing up in lower profit figures and in dubious loans.

One recent victim was Emirates National Bank. This bank has only one branch and is owned by Mr Majid al Ghurair, a member of a prominent Dubai merchant family. It had a capital of Dh 132m (\$36m) at the end of 1983 and assets of Dh 1.1bn, of which 16 per cent were in the form of shares in the Bank of Oman.

This bank, much larger with 22 branches, is owned by two

other brothers in the same family. When Emirates National suffered loan losses from the collapse of a Dubai-based trading concern, Agra Enterprises, the solution was to sell the Bank of Oman shares within the family and to appoint a supervisory committee to run the bank. Mr al Ghurair's bank remains open, as does UBME, though not run by Mr Galadari.

This type of difficulty is being compounded by the slowing of activity in the UAE. Far fewer projects are being commissioned, oil income is down and opportunities for local investment are being squeezed.

This has led to a substantial capital flight to take advantage of dollar interest rates, and has created severe difficulties for the central bank in controlling liquidity in the system.

An issue if Dh5bn in certificates of deposits (CDs) was not taken up by the commercial banks, who complained that the interest rate was too low. The issue was designed to reduce the capital outflow and to redistribute liquidity to those banks starved of funds. (Large deposits tend to be lodged with the big national banks.

Two other measures may have been more successful although they have been accompanied by strong protests from the banks. One is the ending of a dirham/dollar swap facility and another is the ending of interest payments on foreign currency deposited with the Central Bank as part of bank's reserve requirements. The latter are also being increased.

## Difficulties

The problem with these measures is that they may increase the difficulties of the very banks they are designed to help.

Bankers point out that the swap facility is a support for the smaller banks and that the smaller banks could lose deposits to offshore banks by these wishes to take advantage of the attractions of foreign currency accounts.

The Central Bank, however, has little freedom of manoeuvre. For example, it has never been provided with the funding from the emirates' governments due to its under charter. "We cannot even defend the dirham," complained one official.

Its powers to enforce policies such as mergers depend on political consensus among individuals. The bank has had some success in cutting the plethora of branches—foreign banks are now observing the regulation that they may have no more than eight. The rules limiting banks' loans to their own directors have also mainly been complied with, albeit slowly, with some rescheduling required.

But the bank's main hope for reform—a series of mergers—is fraught with difficulty. The UAE lacks a bankruptcy law and suing for interest payments under Islamic law, which bans usury, is a practical impossibility. Ordinary court judgments are often ignored, although the embarrassment factor has been known to encourage some people to pay up.

This year may see the UAE's first merger, but it may create little fanfare in a country where saving face, rather than saving money, may be the most important consideration. The Central Bank may get its way, but it is likely that a cipher expert will still be needed to discover the fact.

Banks where investment and control rests with ruling families or Governments	Control or ownership
National Bank of Abu Dhabi 30*	Abu Dhabi Investment Authority, Bank Chairman: Mohammed bin Rashid, also Abu Dhabi Finance Minister
National Bank of Dubai 11	Ruling family
National Bank of Ras al Khaimah 3	Ruling family
National Bank of Sharjah 2	Ruling family and Bukhatir family, emirate's largest merchant
National Bank of Umm al Qawa 3	Ruling family and UAE nationals
National Bank of Fujairah 1	Ruling family, newly opened bank
Arab Bank for Investment and Foreign Trade 3	Jointly owned, 1 each by Governments of UAE, Algeria and Libya

Banks owned mainly by UAE citizens, with access to Government business	Control or ownership
Emirates Commercial Bank 6	Chairman: Sheikh Tahnoon, also chair of Abu Dhabi National Oil Company and representative of the ruler in the Eastern Region
Khaleej Commercial Bank 12	Abu Dhabi ruling family, also local Mansour merchant family
Federal Commercial Bank 5	UAE citizens from seven emirates
Bank for Credit and Commerce Emirates 12	Local version of BCCI, formed to escape central bank's rule that foreign banks can have only eight branches. Present control not known, formerly large interest by Abu Dhabi ruling family

Banks controlled by major trading houses	Control
Bank of Oman 22	Owned by two brothers of prominent al-Ghurair family. Sought extension of time to comply with Central Bank rule about loans to directors.
Emirates National Bank 1	Controlled by 3rd al-Ghurair brother. Recently exposed to bad commodity loans. Part of assets consist of shares in Bank of Oman.
Middle East Bank 11	Owned by prominent al-Futtaim family with Dubai ruling family interest. Recent difficulties with bad commodity group. Capital injection arranged.
Dubai Bank 5	Owned by 3 Galadari brothers. Took over Singapore assets of third brother during 1983 rescue of his bank.
Union Bank of the Middle East 4	Formerly owned by 3rd Galadari brother, now owned by Central Bank under Government rescue plan. Some controversy about asset rearrangements. Chairman: Ahmed al Tayer, UAE Finance Minister
Commercial Bank of Dubai 8	Chairman: Ahmed al Tayer. Major recent management changes.
Bank of Sharjah 2	Owned by Bukhatir family, largest merchants in Sharjah.

Others	Control
Dubai Islamic Bank 3	Lootah family. Only UAE bank run on Islamic principles, which bans charging of interest.
Bank of the Arab Coast 2	Very wide shareholding, mainly of citizens from Ras al Khaimah emirate.
United Arab Bank 5	Sharjah investors, including ruling family, plus Societe Generale of France.
Investment Bank, Trade and Finance (Investbank) 2	Sharjah based, Lebanese interests.
First Gulf Bank 1	Based in Ajman emirate, formed after 1977 problems of Arab Ajman bank; Kuwaiti interest.
Al Ahli Bank 1	UAE citizens main investors, Kuwaiti interests.

Total local banks 24 with 156 branches  
Total foreign banks 29 with 128 branches

## BANKS OF THE UNITED ARAB EMIRATES

\* No. of branches



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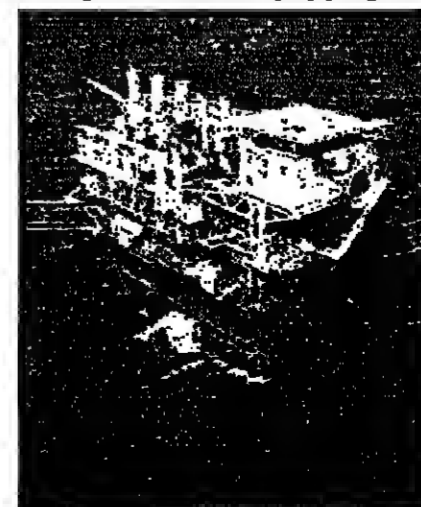


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## United Arab Emirates 4

## Abu Dhabi and OPEC: The Price Dispute

DURING the last two years Abu Dhabi's relations with Opec have been overshadowed by the problems of differentials.

Price differentials between various Opec crudes, of which there are around 130, are based on the relative saleability of different grades of crude oil. They are an attempt to give each crude an equal chance in the market place.

The criteria on which differentials are based are:

- Specific gravity—measured by degrees API, a measurement of the American Petroleum Institute. Lighter crudes have a high API, heavier crudes a lower one. Abu Dhabi's onshore Murban crude is 34 degrees API.

Lighter crudes yielding a higher proportion of high value light products, such as gasoline, are given a premium, heavier a discount, of 3 cents per degree API on each barrel.

● Sulphur content—prices are reduced by 3 cents per additional 0.1 per cent of sulphur content.

● Freight—prices are increased for crudes produced nearer the markets, so that in theory the prices of all crudes should equalise in the market place. This system significantly increases the prices of Nigerian and North African crudes.

Differentials of Opec crudes are related to the \$29 per barrel Arabian Light "marker

crude."

Abu Dhabi's three major crudes, Murban, Umm Shaif and Zakum, are priced at \$29.56, \$29.46 and \$29.36 per barrel. They are light and relatively sulphur free, especially Murban.

Abu Dhabi maintains that its crudes are over-priced and that its production levels have fallen as a result. If it cuts its prices and raises its production, however, its gain will inevitably be at the expense of other Opec members—hence the controversy.

The problem for the Abu Dhabi is that lighter crudes no longer have the advantage they have had historically. In the past, when most refining worked on the basis of distil-

lation, a physical process which produced light and heavy products in proportion to the make-up of the crude oil, light crudes were preferred by refiners because they produced higher grade products with a better price tag.

This advantage has been eroded in the past two years or three years as more refineries world wide have brought on stream catalytic crackers. These operate a chemical process in which the heavier molecules in the hydrocarbon mixture that is crude oil are broken down and reformed into lighter molecules. In effect crackers make light products from heavy crude.

## A contrast of policies

## Abu Dhabi Oil Development

ANGELA DIXON

IN THE mid-1970s the oil policy of the Dhabian Government came firmly down on the twin foundations of conservation and delineation of reserves. This conservative policy contrasts with Dubai's more pragmatic approach where a very high rate of production is aimed at in the offshore fields, now estimated to have a remaining life of around 11 years.

Abu Dhabi's admittedly much larger fields have reserves which, at present rates of production, should last well into the next century. Although there is no official figure for reserves, estimates place them at about 30bn barrels. The figure needs continuous upward revision, since fresh discoveries are still being made.

The 30bn barrels represents merely a fraction of the oil in place as it is based on an extremely conservative recovery factor of 20 per cent. An increase in recovery rates of as little as 1 or 2 per cent is thus worth considerable investment. The figure, moreover, does not include the vast reserves of the difficult Upper Zakum field. This field has low pressure, making the oil more difficult to recover.

ADNOC decided to develop it at a cost which grew to a reputed \$6bn.

Most major projects to exploit oil and gas reserves are either complete or nearing completion. Investment in the oil industry on the scale of the Upper Zakum project is no longer attractive.

The only major active oil project at this time—the enhanced recovery scheme—is very much in line with government policies of conservation. The scheme aims to raise pro-

duction capacity from the entire onshore concession to 1m b/d and is planned to be phased over a five-year period, starting with the Bu Hasa field.

The concession is owned 40 per cent by BP, CFP, Shell, Exxon, Mobil and Parlex. ADNOC acquired its shareholding of 60 per cent during the mid-seventies.

ADNOC's chief executive, the Algerian-born Mahmoud Hamra-Krouha, has been known to express dissatisfaction with the way in which the onshore fields were managed by the former concessionaires.

Primary recovery techniques such as dump flooding, which were standard practice in the sixties, were used. The company was dumping 650,000 b/d of water with 33 dump flood wells in the mid-seventies.

Peak production from the Bu Hasa field was in 1977, when levels averaged 510,000 b/d. Since that time, the Government has progressively reduced the allowable quota from all the onshore fields, partly in line with its own policy of conservation, and partly in response to decisions by the Organisation of Petroleum Exporting Countries (Opec).

Technical experts say that fields such as these, which have been producing for 20 years, need to employ enhanced recovery techniques whatever the original recovery methods were. In the summer of 1984 Fluor Corporation was retained as the outside consultant to the scheme.

Some 200 dual-string wells will reinject water from deep underground strata into selected areas of the oil reservoir, thus enabling the more difficult oil to be recovered. The scheme was originally budgeted at \$2bn, although that figure has certainly had to be revised upwards.

Oil service companies tend to see this scheme as the only existing trade outlet of any importance at present in Abu Dhabi. ADNOC plays a very active role in the project, and

## International Petroleum Investment Corp.

THE International Petroleum Investment Corporation (IPIIC) was first mentioned publicly by the Abu Dhabi National Oil Company in 1981. This investment body finally received presidential approval in May this year. It was incorporated in Abu Dhabi with a paid-up capital of \$200m and an authorised capital of \$500m. Shareholders are ADNOC with 50 per cent and the Abu Dhabi Investment Authority (ADIA) with 50 per cent. Both of these institutions are 100 per cent Government-owned.

The aim of the new com-

pany is to invest in petroleum projects outside the emirate of Abu Dhabi. This could include projects in other emirates, as well as abroad. The type of investment envisaged might be the oil pipeline to Kujalrah, though there are now doubts over the future of this particular project.

ADNOC claims that IPIIC's activities will be modest to start with, but the new company is clearly modelled on part of the operations of the Kuwait Petroleum Corporation.

placing and training staff. The foreign companies and their subsidiary shareholders, however, do not always see things in this light. As clients they pay hefty fees for the services provided by ADNOC. They sometimes feel dissatisfaction with the arrangement.

ADNOC's project managers seem to view the relationship in the light of parent company vis-a-vis subsidiary rather than consultants vis-a-vis client. The minority partners consider this attitude is used to push through decisions without the consultation which might usually be expected in projects where contracts for hundreds of millions of dollars are being awarded.

Internally, ADNOC has reorganised its structure, grouping its functions under three major directorates—Exploration and Production, Marketing and Processing and Refining. All responsible to General Management. Heading these departments, and in several other senior posts, are a number of young nationals. This is a recent development and reflects the success of the government's policy of training nationals to take their place in running the oil industry.

## Squeezed from several sides

## Production levels

ANGELA DIXON

A WRITER once said of Abu Dhabi, that the "oil murrums money." This money comes almost exclusively from oil.

The emirate has no trading history, and in the years since discovery of oil it has had little incentive to trade in anything else. Abu Dhabi is first, last and always, an oil town.

The aquamarine sea which surrounds Abu Dhabi is dotted with rigs, and during the past year a well being tested on an inshore island sent clouds of thick black smoke billowing across the city for a whole day. It is hardly surprising that downward pressures on the oil price have been closely monitored in the emirate, especially since the middle of 1984 when these pressures became acute.

By the end of 1983, government oil revenues in the whole of the UAE had fallen by nearly 50 per cent compared with 1980, according to Central Bank statistics—from \$14.3bn to \$7.35bn.

Revenue figures up to June 1984 remained stable, but the whole year figures, for which

statistics are not yet available, may well show a further decline. In that time Abu Dhabi's oil price found itself being squeezed from several directions at once.

Foreign major oil companies with equity partnerships in Abu Dhabi, which market 40 per cent of onshore, and probably some 20 per cent of offshore crude, reduced their liftings considerably. Their argument was that the profit margin allowed to them—\$1 per barrel—was no longer sufficient to provide an income. At least one company claimed that the cash flow on oil sales from Abu Dhabi had become negative for the equity partners.

The matter was eventually settled—but only temporarily. Equity partners, which include the major oil companies BP, CFP, Exxon, Mobil and Shell as well as the Gulbenkian interest (Parlex) and the Japan Oil Development Company (JODOCO) have privately declared themselves less than satisfied with the basis on which the new margin is calculated, and negotiations are scheduled to be renewed at the end of January.

The size of the margin, now \$1.80 per barrel, has been agreed, but partners would prefer the margin to be related to a fixed percentage of the official

price, rather than, as at present, the market price of oil.

At the same time ADNOC's major customers, Japanese trading houses, requested a drop in prices. A decrease of 50 cents for onshore oil and 60 cents for offshore oil was agreed in principle.

At the end of November, the trading houses all had refused to renew their contracts for 1985 unless better terms were offered—a cut of \$2 per barrel was spoken of.

On the Opec front, Abu Dhabi struggled to get free of a strait-jacket of differentials and production levels which had been devised to meet a situation now radically changed. The Abu Dhabi Government felt let down by what it saw as Opec's failure to address itself to the pressing problem of differentials. This was coupled with what were perceived as hidden discounts by other Opec members, in the form of freight and insurance advantages for North African competitors.

There were other practices which it thought left Abu Dhabi at a disadvantage in the markets. Officials detailed the Saudi practice of mixing crudes to achieve a more saleable quality at the same price, and the Kuwaiti practice of processing most of its crude and selling the products effectively at a discount.

Although the issue of differentials remains a headache, the issue of production levels in the sense of keeping within the Opec quota levels, has become less pressing.

Until the October 1984 Opec

meeting the UAE quota was 1.1m barrels per day. Dubai has always taken an independent line and has openly refused to be affected by Opec decisions, so a notional \$50,000 h/d was set aside to account for its share. Abu Dhabi set itself a quota of \$50,000 h/d.

The Opec meeting in October reduced the UAE quota to \$50,000 h/d, but the position within the country has become less clear, as the Government has made no statement on the distribution of the cuts and Dubai can be expected to continue producing at its usual rate.

Abu Dhabi was very probably within its assumed new Opec quota of 600,000 b/d over the four-month period from August to December. In August production dropped away dramatically, and although levels recovered in September, they fell again during November.

The offshore fields which have a government interest in Lower Zakum and Umm Shaif at one time felt to what must be an all-time low of 60,000 h/d from an allowable of 215,000 h/d.

These low levels were most noticeable during negotiations with equity partners for a new equity margin—the inference being that the partners were dropping their liftings to put pressure on the Abu Dhabi Government. Improved levels of production in 1985 will depend on whether direct market pressures will ease, since equity partners will still be unwilling to lift oil which they cannot sell.

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# Development along sensible lines

**Fujairah**  
MICHAEL FIELD

THE OLD Sheikh of Fujairah, Mohammed bin Hamad al Sharqi, who in his prime was a tough, independent-minded spirit, was the last person in Arabia to be honoured by the British.

In 1925 he not only refused to release a slave girl, he had recently bought in Oman but insisted the British Political Resident at the same time. When he ignored the ultimatum he was given, the PR had a warship open fire on his fort.

Decades later he surprised a visiting British diplomat, who had not heard of the episode and had tactlessly suggested that he ought to repair the towers, by accusing the official of having caused the damage.

In 1952 Mohammed bin Hamad arranged for the British to recognise him as the ruler of his own territory — he had previously been the rebellious chief of part of the state of Sharjah.

As Sheikh of Fujairah he continued to run his affairs on individualistic lines. He made the import of alcohol the bulwark of his treasury. He dealt with one of his enemies (on a criminal according to another version of the story) by imprisoning him, laying the bricks and mortar with his bare hands and chucking as he did so.

Fortunately, or unfortunately, depending on one's point of view, Fujairah has become a more ordinary place since Sheikh Mohammed died in 1975. Today it has a National Bank, an expanding port and a not very good Hilton Hotel.

Fujairah has prospered especially since 1980. Its Government has established, or helped to establish, companies to produce cement, rock and aggregate, marble, rockwool (a fireproof insulating material) and ceramics.

It is intended that the rock of its mountains, which is its main physical resource, will be further exploited by a glass bottle plant, which it is hoped will be built by the multinational government-sponsored Arab Mining Company.

Other agricultural projects, for chickens, fruit, vegetables and dairy production, have been established or are being built in the state. There is a Fujairah Insurance Company, a Fujairah Trading Company, a building industries company and a real

estate company, which has recently completed work on 16 large apartment buildings.

Two offshore oil concessions have been granted — one to the Lundin Group of Canada and one to Meridian of Australia. The first company has finished its seismic work and hopes to start drilling in April or May, but the second has made little progress and is likely to relinquish its acreage.

Most probably Meridian's area, the northern portion of Fujairah's offshore acreage, will be offered again early in 1985. Other Fujairah acreage now available comprises two onshore areas.

The most important of all Fujairah's development projects is the port. This was built between 1979 and 1982 at a cost of \$75m and is run by the Fujairah Dock and Railway Company.

It has two berths for large container ships completed. A further two similar berths and some berths for smaller vessels are about to be built under an extension programme. Consultants for the project, and for virtually every other Government scheme in Fujairah, are the Professional Group of Australia, owned by an English company, Mouchel.

## Transshipment

The idea of the port is that it should be a transshipment centre at which very large container vessels sailing from the major industrialised countries will deposit cargo for distribution by smaller vessels in the Gulf and the Indian Ocean basin.

It is being helped slightly by the continuation of the Gulf war, though this has certainly not been a major factor in its success. The extra insurance paid by cargo ships sailing into the Gulf as far as Dubai is minimal, and because so far no dry cargo ships headed for Arab ports in the Gulf have been attacked it has not picked up the business it hoped it would from owners and crews being physically frightened of sailing through the Straits of Hormuz.

So far the port has been chosen as a distribution centre by one major company, American President Lines, and has been put on the routes of a common carrier distribution service run by the West Asia Container Line. An Australian company uses it as a distribution centre for sheep, which the Indian Ocean 100,000 at a time.

In the next year or so the

Fujairah Government is hoping that its state's fortunes will be bolstered by several further projects. These are its own airport, which will be used mainly for cargo, the Gulf Co-operation Council strategic food reserve, which is to be placed outside the Gulf for security reasons, and the Abu Dhabi-Gulf of Oman oil pipeline.

This last project, for which the survey work has been completed, is talked of in Fujairah as a virtual certainty but in Abu Dhabi now it is hardly mentioned. The line would have no economic advantage for Abu Dhabi, only a possible strategic convenience.

In the last five years or so Fujairah has been counted a success because it has pursued its development along sensible and economical lines. When working on its industrial and mining schemes which it has had to finance itself — as opposed to the social and infrastructural projects financed by the federation — it has built on a project at a time and used the revenue from the scheme just completed to help pay for the next.

The state has not embarked on over-optimistic projects (except perhaps the airport), nor put its faith in any of the exotic development formulae espoused unsuccessfully by other northern emirates, nor run up large debts which it has expected Abu Dhabi to pay.

It has incurred Abu Dhabi's goodwill not only through its sobriety but through its federal-mindedness. One never sees the emirate's own flag flying in Fujairah, only the flag of the Federation.

The state's own meagre revenues, mostly from the port and its mining schemes, are supplemented by money from Sheikh Zayed, who visits the state every year, the Abu Dhabi Fund for Arab Economic Development and, it is thought, the Abu Dhabi Investment Authority.

The Ruler, Sheikh Hamad bin Mohammed, has good links with the Presidential Chamberlain, Sheikh Surour bin Mohammed al Nahayyan, who supervises the foreign investments of both Sheikh Zayed and the Abu Dhabi Government.

The credit for Fujairah's pragmatic policies goes to the young Ruler and his brother, Sheikh Saleh. Both are English-educated — the Ruler is a graduate of Hendon Police College and Saleh went to Sandhurst — and both speak good English.

Sheikh Hamad looks after the affairs of state, the governing



The main street of Fujairah

of his own people and relations with the Federation, and Saleh runs the state's economy.

To supplement the Government's development spending, Saleh has launched the Fujairah National Group, an entrepreneurial operation wholly owned by himself, which invests in commercial projects that are beneficial to the state.

In the long term Sheikh Saleh's schemes may become controversial, possibly with other members of the ruling family, because he seems likely to reap considerable profits from them. For the time being, however, he is investing entirely in Fujairah to the obvious advantage of the population.

During the next few years it seems that Fujairah's development will hang in the balance.

On one hand the Abu Dhabi pipeline project and the GCC (Gulf Co-operation Council) food store may go ahead, and the port may attract more trade. Under this scenario more lines would decide to use Fujairah as a distribution centre, the Gulf war would continue and the state's own exports through the port would increase.

## Regular trips

Also the road route to Dubai would develop, with trucks finding sufficient cargoes at the Fujairah docks to make regular trips worthwhile and being able to find a reasonable supply of empty containers in Dubai to move back to the east coast.

If this were to happen the trucks might cut their rates sufficiently to make Fujairah an attractive unloading point not only for regional transshipment cargo but also for goods being brought into the main centres

of the UAE.

It may also be that the idea of transshipment will fast gather momentum. As more shipping lines build very large container vessels which they will want to keep sailing for as much of the year as possible on their trunk routes, the principle of transshipping more into small vessels and using them for distribution becomes more financially attractive, even though it involves a greater number of loadings and unloadings.

Obviously the more shipping lines the port can attract the more transshipment cargo it will accumulate and the more calls it will receive from local vessels.

On the other hand it is possible that Fujairah's development will stagnate. The pipeline and the food depot may not be built, for reasons entirely beyond Fujairah's control. The airport may prove a failure, both as a cargo centre and as a landing place for package tours, some of which it is hoped will base themselves in Fujairah as the UAE tourist industry begins to gather momentum.

Likewise the port's traffic may simply not develop. It might suffer the same fate as the smaller Khor Fakkan port, a few miles to the north, which lost its only transshipment customer, Mediatra, at the end of 1982 for reasons which had nothing to do with its own performance.

If these setbacks occur Fujairah will not be burdened with vast debts, but it will be difficult to see how the development of its economy will be sustained. The state's problem will be simply that it will have run out of development opportunities.



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## Greater exploitation of agriculture

**Ras al Khaimah**  
ANGELA DIXON

OPTIMISM has a guarded air in the emirate of Ras al Khaimah these days. A gas condensate find which was expected to boost the economy has so far only partially done so, while cash-flow problems at Federal level have begun to show their effects here — as in all the northern emirates.

Ras al Khaimah is the most northerly of the emirates facing the Gulf. Its population of 70,000 comprises a majority of local Arabs, many of them of Iranian origin. Picturesquely situated around its lagoon at the foot of the Musandam mountains, the town of Ras al Khaimah is dotted with date-palms which give their name to a section of the town — al Nakheel.

Agriculture has always been

possible here, because the mountainous and hilly collected rainwater which gathers beneath the ground and is accessible by means of wells. Recently it has become more commercially exploited. Dig-daga ditches from coastal towns to other emirates as well as Ras al Khaimah, and temperate climate vegetables have been highly successful. Citrus fruits are a recent venture.

Ras al Khaimah's water supply, so dependable in the days of mulepower, is heavily utilised in a more mechanised age. Replacement is not keeping up with use, and so the water is becoming more and more saline. Even tap water, which comes from them of not suitable for drinking. Yet there are no plans for a desalination plant. One reason is that it would be too costly for this emirate's finances to bear.

A scheme for a reverse osmosis desalination plant, to have been commissioned by the

Federal Ministry of Water and Electricity, was shelved due to budget cuts.

Recently a committee was formed by the Government to investigate the water and power needs of the northern emirates, and the question of Ras al Khaimah's water supplies may well be high on the agenda. The aquifers cannot be expected to last for more than another ten years if they continue to be utilised at present rates.

Ras al Khaimah has no sewerage programme. This would also be a costly business, though environmental standards are closely adhered to and the coastal waters are cleaner than most others in the Gulf.

Ras al Khaimah has its own electricity authority, whose independence is carefully guarded. During the summer of 1984 a minor crisis in fuel supply occurred. The state is supplied with fuel for its power stations and industries by the Emirates General Petroleum Corporation (EGPC), a federal body which is responsible for product distribution in the northern emirates.

The Ras al Khaimah Government argued that it was unable to pay the required (subsidised) price, and fuel supplies were temporarily cut off. The matter seems to have been amicably resolved, and Ras al Khaimah now receives federally-supplied fuel free. Since September some of that fuel comes from the Seja field in Sharjah, for the distribution of which EGPC has constructed a pipeline network.

Ras al Khaimah's cement companies utilise gas from the state's recently-discovered offshore gas/condensate field, which came on stream early in 1984. EGPC gives Ras al Khaimah steady facilities for the cement plant, and in return RaK has agreed to feed its gas into the EGPC pipeline if necessary.

If Sharjah gas is ever used in the cement plants they will pay at the full rate, that is \$3.50 per m3. For gas from the state's own field the plant pays at one-half the market rate.

Ras al Khaimah's gas comes from the offshore Saleh field, of which so much is hoped. The field, which has been producing some 8,000-7,000 b/d of condensate and 50 mmsc/d of gas, is left to a consortium consisting of Gulf Oil, Petrobrak, the German company Winterhall, International Petroleum Corporation of the Canadian-based Lundin group, and a Taiwanese company, Overseas Petroleum and Investment.

Ras al Khaimah set up a National Oil Company (RaKOC) in which the Government holds a 50 per cent interest, with the consor-

tium holding the remainder. Income is divided on a 50-50 basis, with the Government marketing alternate cargoes.

A loan of \$125m was raised by a consortium led by the National Bank of Ras al Khaimah and Citibank to help finance oil production. The oil is costly to produce — perhaps \$12-15 per barrel, which is natural at depths of 15,000ft, in 300ft of water.

The RaK authorities are unwilling to discuss price, but comparable condensates in December 1984 was selling for \$26.75-27 per barrel. Government income is around 72 per cent of total income with royalties at 12.5 per cent.

The Emirate has one of the deepest harbours in the Gulf and exports cement, aggregate and rock to places as far apart as Kuwait and Diego Garcia. Export figures for the first nine months of 1984 were down by 12 per cent on the previous year, but had recovered somewhat towards the end of the year, while imports through Mina Saqr rose commensurately with the requirements of the fledgling oil industry.

Kuwait investment is clearly evident in Ras al Khaimah; for example, the Gulf Pharmaceutical and several insurance companies have committed money in the state. Gulf Cement, one of Ras al Khaimah's cement companies, has a strong Kuwaiti shareholding and exports mainly to that state. However, recent cash-flow problems there have affected exports of this commodity.

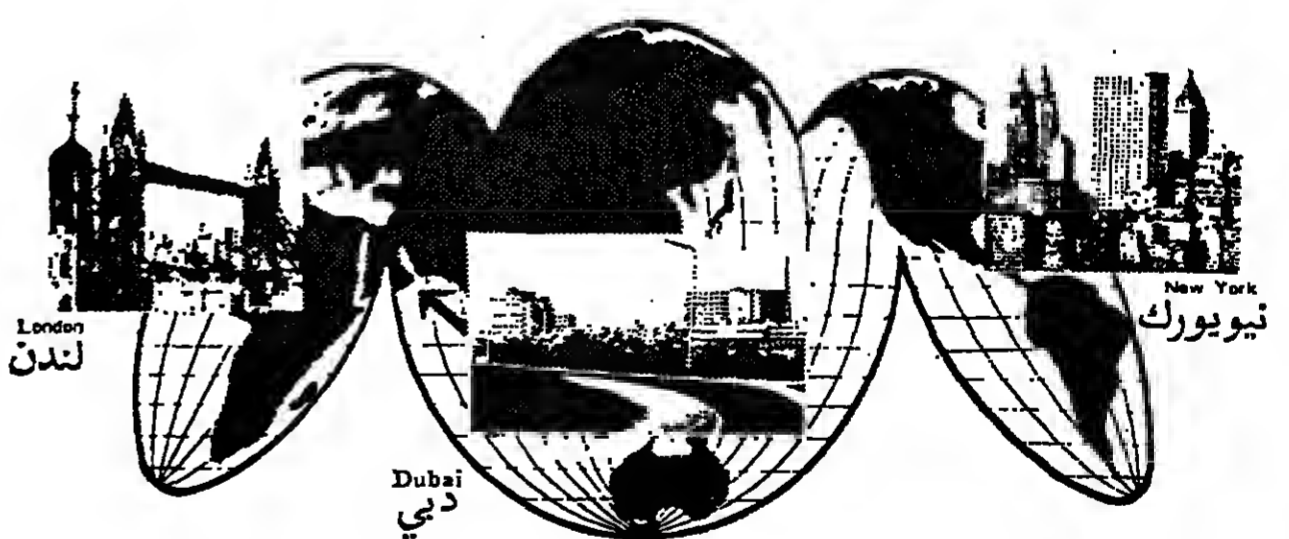
The Ruler of Ras al Khaimah, Sheikh Saqr bin Mohammed al Qasbi is one of the longest-reigning of the Gulf sheikhs, having come to power in 1948. A strong personality with a clear public image, he trails an aura of RaK's swashbuckling past. His eldest son, Sheikh Khalid, is one of the brighter personalities among the younger UAE elite. Educated in Britain and the U.S. he takes a personal interest in RaK's affairs at a day-to-day level. Some diplomats think it is pity that his talents are not more utilised at a Federal level, but as yet he has no official role to play in central government.

He is strongly pro-federation (which his father has not always been) and sees close bonds between the emirates as the best hope for the future. He feels that a much more prominent and useful role could be played by the Supreme Council, the body which consists of the rulers of all the emirates. This meets infrequently, but Sheikh Khalid feels that when it does meet useful decisions are invariably made.

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## United Arab Emirates 6

## Family rules in collegiate style

Dubai Politics  
MAGGIE FORD

THE UNITED Arab Emirates is the kind of place where enormous political significance can be found in a set of architect's drawings and where the showing of a horse race on television can cause public dispute and religious indignation.

Politics are not revealed in either the Western parliamentary sense or in the Eastern bloc central committee sense, but are played out within the ruling families. The younger generation of these families is now in the process of exercising more power, and in Dubai, this has led to some uncertainty about the future.

The old ruler, Sheikh Rashid bin Said al Maktoum, has relinquished decision-making to his sons, although he still holds his majlis, where people can attend to petition him, and is

occasionally consulted about matters of state by his eldest son and heir apparent, Sheikh Maktoum.

Much of the important decision-making in Dubai, however, is done by Sheikh Mohammed, Sheikh Rashid's third son, and it is the doubt about who will be in actual control that has led to some worries in recent years.

## Senior voice

From 1971 to 1979 Sheikh Maktoum was Prime Minister of the UAE, a job which his father reclaimed when Dubai decided that it needed Federal money and when it was felt that a very senior voice was needed to speak up for Dubai's interests during a tricky set of federal negotiations. Sheikh Maktoum became deputy Prime Minister and has not played a very strong role in either federal or Dubai affairs recently.

But there are now signs that his voice may be heard more strongly. The set of architectural drawings that created a

stir was drawn up in London for a new office for the Crown Prince, to be built opposite the present Ruler's office beside Dubai's famous creek. Contracts are expected to be awarded shortly and building work to be started within months.

The new office is expected to be accompanied by an expanded staff for Sheikh Maktoum, including Sheikh Mana, a member of the family who is both his cousin and his wife's brother, as the head of his secretariat. He may also obtain the services of Mr Kamal Ramsha, head of Dubai Municipality, as a principal adviser.

Sheikh Mana, aged about 40, is slightly younger than Sheikh Maktoum, speaks good English and is officially head of the Dubai Civil Aviation Department, but has not been active in his post for some years. At one stage, it was thought that Sheikh Mohammed had preferred to appoint his own men in the department.

Sheikh Maktoum is liked for

his generosity and kindness and although he has been slow to take responsibility for specific tasks, he is thought to be intelligent and sensitive to the attitudes of the people. A suggestion that he plans to take up the role of Federal Prime Minister again may indicate that his apparent shyness and reserve is waning, but he is still nothing like as forceful a figure as his brother Mohammed.

Sheikh Mohammed at present holds most of the reins of power in Dubai in a pair of hands that are very capable and becoming increasingly experienced. He is UAE Defence Minister and in charge of police and security in Dubai, an especially important post in any Gulf state.

Sheikh Mohammed also controls Dubai's oil, which generates the majority of its annual income of around Dh 15bn (\$4.1bn). He has taken a keen interest in this subject, personally marketing the percentage of the oil sold by the Government on the spot market.

Transactions are made by telex from his British adviser's home on his instructions, which may be made by telephone if he is abroad.

Very little information is available about Dubai's oil affairs — Sheikh Mohammed would only say that the emirate's production is between 250,000 and 550,000 barrels a day. Industry estimates suggest a level of 360,000 b/d. It reports that the Government sells 50 per cent of the production are correct, that would mean that Sheikh Mohammed is personally administering income of around \$1.75bn a year.

It is clear that he has gained a technical and marketing knowledge of a complex subject that few citizens of his country could emulate.

"The Boss," as he is known by his expatriate advisers, has also taken a keen interest in the financial and business affairs of the emirate, which are the main portfolio of Sheikh Rashid's second son, Sheikh Hamdan.

## Took charge

When the Union Bank of the Middle East, owned by Mr Abdul-Wahab Gaidari, a member of one of Dubai's great trading families, found itself in trouble in 1983, Sheikh Hamdan was abroad.

It was Sheikh Mohammed who took charge of arranging the bank's rescue, a job which a number of hard decisions had to be made, especially when people reacted badly in the face of impending ruin.

Although the ramifications of that bank's problems may not yet be over for the Dubai banking system, and the handling of the formal decrees announcing the rescue raised some eyebrows, Sheikh Mohammed is generally reckoned to have acted quickly, firmly and sensibly in a situation which could have badly affected Dubai's reputation as a trading and financial centre.

In the defence area he has also been active, acquiring a good reputation as a negotiator in a number of recent hijack crises in the region. If it is shown that the hijackers who took over a Kuwaiti airliner and killed an American hostage in Tebran late last year boarded the aircraft in Dubai, he will be greatly displeased that such a loophole has been exposed.

The defence portfolio can be quite a tricky one to manage in the UAE, because of the different attitudes of Abu Dhabi and Dubai, the federal paymasters.

When Abu Dhabi decided to buy 18 Mirage 2000 fighters from France last year in a deal worth \$450m, for instance, the views of Dubai do not seem to have been heard. This can, of course, happen in other areas. Recently the view in Abu Dhabi that Dubai should con-



Sheikh Mohammed bin Rashid al Maktoum

tribute towards the national budget deficit does not appear to have been heard in Dubai.

The question of horse racing illustrates the problems that face all rulers of the emirate—the problem of falling oil revenues putting a squeeze on funds, the difficulties of reconciling a westernised development plan with a population that is oriented to religion and tradition and the matter of the future style of government.

The sons of Sheikh Rashid are all enthusiastic about horses. They have set up a substantial stable based mainly in England and are keen to contribute to the improvement of British racing.

Although the business has required substantial investment in the early stages, it is already showing good returns—between them Sheikh Hamdan and Mohammed won over £700,000 in one year alone in prize money without counting future revenue from breeding.

Although, as a business, the Maktoum family's horse investments look fine, they can have other ramifications in this part of the world. The revelation that a particularly fine horse, with an appropriate \$10m price tag had been added to the stable at a time when some contractors were experiencing delay in payments from the Government, provoked a certain amount of comment, for instance.

The difficulty relates to the lack of distinction in the emirate between private and public money. This system has been inherited by the brothers from their father and it may be very difficult for them to change things, should they want to,

while he is still alive.

Sheikh Rashid always kept firm control over the purse strings, making most financial decisions himself with assistance from a few advisers. To this day, his policy is reflected in what must be one of the smallest bureaucracies in the world. The Dubai Finance Department consists of three officials, petroleum affairs advisers number two, there is one foreign investment adviser.

To change this system, described by one adviser as "an oasis of sanity" and by most people as extremely efficient, would require great care and could be a mistake. But an interesting comparison can be made with neighbouring Abu Dhabi, where the ruling family takes a percentage of the oil income for its own spending which is administered by a separate office.

## Management

Although figures are not released, there appears to be less doubt about the nature of that emirate's economic management.

Horse racing disputes have also cropped up in the religious and traditional area, a particularly sensitive one. It was perhaps unfortunate that a particular race was broadcast live by satellite on television during Ramadan, the month of fasting that all Muslims should observe.

The ruling family has recently given a substantial donation for the rebuilding of mosques in Dubai (from "private" funds) and stronger liaison with religious leaders

is thought likely, perhaps through the medium of Sheikh Maktoum's new office.

Those close to members of the ruling family stress that government decisions are made on a consultative basis with a "duty Maktoum" always present and in charge. Although it is clear that much power rests with Sheikh Mohammed, most people in Dubai do not feel that there will be any move away from the collegiate style while Sheikh Rashid is still alive.

The Maktoum family has a reasonably peaceful recent tradition and the fact that all four sons have the same mother (Sheikh Rashid's only wife, who died two years ago) should mitigate against the kind of rivalry which has riven other Gulf ruling families, sometimes in deadly fashion.

Both Sheikh Mohammed and Sheikh Maktoum have their own merchant, asked which majlis he attended, replied "all three"—Sheikh Rashid's as well.

His comment reflected both the fact that age is a matter for respect in the Arab world, and that a certain amount of hedging of bets may be occurring for the future. Sheikh Rashid's sons are thought to exhibit separately different parts of their father's personality, and both Sheikh Maktoum and Sheikh Mohammed are said to be keen to act in a similar way to their father, who presided over a decade of huge change with considerable success.

It may be that for Dubai consultation will be seen to be the best solution for quite some time.

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## Gulf war takes its toll

## Dubai Trade

MAGGIE FORD

A SMALL HOLE, perhaps a foot in diameter, marks the entrance of the missile through the ship's hull. The steel is buckled at the edges but the real damage is inside. The engine room is a burnt-out shell, the decks are fire blackened and the giant oil tanker is fit only for the scrapyard.

Other victims of the Gulf "tanker war" will survive. One small oil supply ship hit by an Iraqi missile has an intact engine room, although no trace was ever found of the bodies of her captain and first mate, on deck when fire engulfed the ship.

A third victim, a Very Large Crude Carrier, is to be cut in half, its undamaged part lifted, with a sound section of a similar ship. The work will be done in Dubai Dry Dock, where a number of ailing tankers hit by Iraqi or Iranian missiles are now being taken for repair.

The dry dock, macro in concept, though it is, provides an example of the way business in the UAE is now having to operate in the wake of falling revenue from trade (due mainly to the Gulf war), a slow oil market and near completion of the construction work of the past 10 years.

In the dry dock, designed specially for giant supertankers, none of which have yet been built, one could see late last year an Iranian fishing trawler. So small was this boat that it was not economically worthwhile to empty the dry dock so as to repair it, and frogmen were hired for the job. Rarely can they have had so much space to accomplish their task.

The attitude of using all resources, no matter how minor that usage is, to gain some income and employment, is spreading in Dubai in the face of the recession. There is no point, it is thought, in gearing up for a big job and keeping the workforce unproductively waiting for it, if it can be employed usefully in the meantime, especially if the big job

is a doubtful one.

Large merchant families are tending to take the same view. Although Dubai has almost completed its infrastructure some contracts were available last year, including a sewage scheme costing Dh 550m (\$221m), road and tunnel construction worth Dh 417m and the expansion of the airport with a second terminal (Dh 111m).

But most companies are being to look towards servicing the local economy for at least part of future earnings. Better management techniques are being introduced, so that expensive stocks are not kept, and fewer immigrant workers are being employed. Some companies are looking abroad for expansion although this development is in its early stages.

## Import statistics

The slowing is reflecting in the import statistics. Less contractors' equipment, machinery and vehicles was imported last year although some kinds of building materials such as cement and pipes showed an increase. Watches, gold jewellery and electronics were all down.

In the first six months of 1984 the value of imports at Dh 8.7bn was down 14 per cent on the same period of 1983, when the figure was Dh 10.1bn. The main slip for the Dubai trading economy would be an end to the Gulf war, it is generally agreed.

It is a sad paradox that the ability of the Dubai dry dock written off a few years ago as a white elephant, to report an operating profit in its first year is partly because it is attracting business from a war that is otherwise a disaster for the region.

Business would be even better for the dry dock, of course, if the war ended and shipping was not subject to attack. A large number of crippled ships await repair in Iranian ports which would provide an excellent boost for the dry dock if hostilities were to cease.

In the past few years the effects of the war have been felt particularly in Dubai which has strong historical links with Iran. Some of Dubai's leading merchants have Iranian backgrounds and the country is the

largest market in the area. In the first six months of 1983 Dubai's re-export trade with Iran plummeted to Dh 89m but has shown a steady improvement since then, reaching Dh 326m in the first six months of last year.

The nature of the trade has changed since the introduction of the Islamic regime and now is more likely to consist of food and machinery or transport equipment rather than the cosmetics, electronic consumer goods and cigarettes sold during the Shah's reign.

But if the Iranian market was stable last year re-exports generally were almost 20 per cent down, falling from Dh 2.8bn in the first six months of 1983 to Dh 2bn in the same period of 1984.

A fall in the silver price cut this trade with India, to the bone, and stricter controls on that country's coastline affected smuggling.

Much of the economic activity in Dubai is related to Government spending and the emirate has not suffered the type of serious payments delays to contractors as has Abu Dhabi.

This is mainly because its income from oil has remained reasonably constant and is even

projected to increase as production from the Marjan gas and condensate field comes on stream.

Dubai pursues its own independent oil policy and it is unlikely that any of the production cuts agreed within the Organisation of Petroleum Exporting Countries will affect its output. Nor does it have the difficulty with differentials that is affecting sales of Abu Dhabi light crude, which is thought to be overpriced compared with heavier grades.

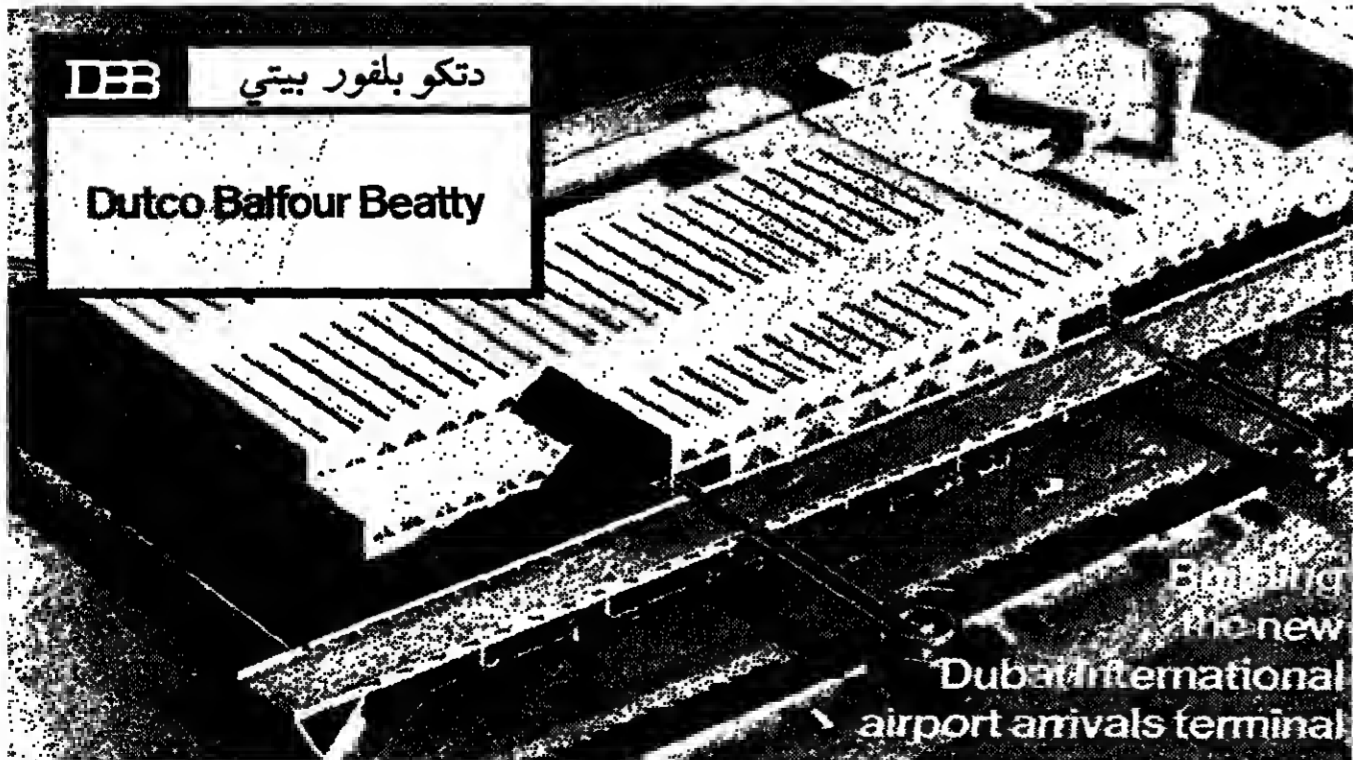
## Running deficit

Income last year from oil was probably Dh 12.6bn, out of a total income of between Dh 14bn and Dh 15bn. Dubai is supposed to contribute 50 per cent of net oil income to the Federal budget, itself presently running a deficit, but this is likely to remain a bone of contention.

Such are the differing styles of Government, with Abu Dhabi having a civil service bureaucracy and Dubai having only a few advisers, and such is the independent nature of Dubai, that arguments over how the money is spent is likely to be a perennial feature of UAE affairs.

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## Disputed border holds up deals

### Dubai & Sharjah Gas

MAGGIE FORD

LATE IN 1980 Sharjah's offshore oil concessionaire, Amoco, made a gas and condensate discovery which has revolutionised the state's economy. The company is already exporting some 60,000 barrels a day of condensate to its own refineries in the U.S. and to arm's-length customers in Japan.

Of the gas, at present a small proportion, about 80m cubic feet a day, is being used by power stations in Sharjah, but most is being flared, lighting up the night sky of much of the northern UAE. As from next year the bulk of this will be fed into a grid covering the other northern emirates, Ras al Khaimah, Ajman, Umm al Qaiwain and Fujairah.

Some gas will remain, however, and an obvious use for this wasted asset would be to extend the pipeline network to neighbouring Dubai, which is currently spending 75 per cent of its budget on electricity generation. Officials estimate that running the generators on gas rather than fuel oil would save Dubai Dh 2.5m (\$881,000) a day.

Negotiations started, involving Amoco, which operates the gas field under an old-style concession agreement with the Sharjah Government, under which Amoco owns the production, paying a 14½ per cent royalty to the Government and a 77 per cent tax on net profit. Dugas, the Dubai natural gas company which would receive the gas, and the Emirates General Petroleum Company (EGPC), which markets all petroleum products within the UAE, were also involved along with the Dubai Petroleum Company.

Negotiations proceeded on the basis of price. EGPC had already signed a contract to pay Amoco \$3.60 per 1,000 cu ft of the gas being supplied to the other Emirates but this was felt too high by Dubai, which pointed out that the average price in the U.S. was below \$2 per 1,000 cu ft.

Sharjah pointed out that a higher price could be justified because of the valuable liquids that could be extracted from the



gas at Dugas's plant and sold—Sharjah is still building a liquids extraction plant which will not be ready for some time. Dubai countered with the argument that a wasted asset was worth nothing anyway to Sharjah.

Sharjah then drew attention to the flexibility needed—demand varies by up to four fifths from winter to summer. The negotiation was said to be quite hard, because unlike Ras al Khaimah, Dubai would not get a federal subsidy to pay for the gas.

Eventually, it is said, a figure was agreed and industry reports suggest that inquiries were made about the pipeline contract, which would be worth between \$15m and \$25m. There, for the moment, however, the matter rests.

The reason for the delay is the existence of a second negotiation, talks on which may or may not be in progress. This relates to a border dispute between Dubai and Sharjah which has been going on for some years.

Underneath the disputed border section lies a section of the Margham condensate and gas field which Dubai claims as its own and considers a strategic resource for the future when its offshore oil runs out. The Margham field is currently producing 20,000 b/d of condensate

and is itself flaring gas while compressors are tested.

(Dubai could, of course, use gas from the Margham field to generate electricity but this would mean that it would be able to extract less of the valuable condensate. It prefers to reinject the gas under high pressure to conserve the resource).

The border dispute has generated two incidents. Eighteen months ago when Amoco seismic crews started working in an area claimed by Dubai, there were reports of a substantial police and military presence to eject the crews.

A return match seems to have been played this summer. Arco Dubai, the subsidiary of Atlantic Richfield which operates the Margham field, spotted a well in territory claimed by Sharjah, but this time the message to remove it seems to have been successfully delivered without recourse to a show a force.

Certainly, the Dubai electricity authority is sufficiently confident that it will receive gas supplies from somewhere, to spend Dh \$8m on the conversion of 5 turbines to run on dual fuels and to buy new gas turbines.

A little chat between the respective rulers of the emirates and a moving of the border a little in Sharjah's favour may well be all that is needed.



Sheikh Zayed bin Sultan al Nahayan

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#### SHARJAH:

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Deputy Ruler: Sheikh Saqr bin Muhammad al Qasbi.

#### RAS AL KHAIMAH:

Ruler: Sheikh Saqr bin Muhammad al Qasbi.  
Deputy Ruler and Crown Prince: Sheikh Khalid bin Saqr al Qasbi.

#### Umm al Qaiwain:

Ruler: Sheikh Humaid bin Rashid al Na'im.  
Deputy Ruler: Sheikh Hamad bin Muhammad al Sharqi.

#### FUJAIRAH:

Ruler: Sheikh Hamad bin Muhammad al Sharqi.  
Deputy Ruler: Sheikh Rashid bin Saif al Sharqi.

#### Umm al Qaiwain:

Ruler: Sheikh Rashid bin Ahmad al Mu'alla.  
Deputy Ruler: Sheikh Saud bin Rashid al Mu'alla.

#### FEDERAL GOVERNMENT

Head of State: President Sheikh Zayed bin Sultan al Nahayan.  
Ruler of Abu Dhabi.

Vice-President and Prime Minister: Sheikh Rashid bin Said al Maktoum, Ruler of Dubai.

First Deputy Prime Minister: Sheikh Maktoum bin Rashid al Maktoum.

Second Deputy Prime Minister: Sheikh Hamdan bin Mohammed al Nahayan.

Finance and Industry: Sheikh Hamdan bin Rashid al Maktoum.

Interior: Sheikh Mubarak bin Mohammed al Nahayan.

Defence: Sheikh Mohammed bin Rashid al Maktoum.

Economy and Trade: Saif Ali Jarwar.

Information and Culture: Sheikh Ahmed bin Hamed.

Communications: Mohammed Said al Mualla.

Public Works and Housing: Mohammed Khalifa al Kindi.

Education and Youth: Fraj Fadhl al Mazrouie.

Petroleum and Mineral Resources: Dr Mans Said al Oteiba.

Electricity and Water: Humaid Nasser al Owais.

Justice: Abdullah Humaid al Mazrouie.

Public Health: Abdul Rahman al Madfa.

Agriculture and Fisheries: Said Mohammed al Raghani.

Ministry of Planning, described as vacant. The Acting Minister is Humaid al Mu'alla.

Labour and Social Affairs: Khalifa al Roumi.

Islamic Affairs and Awqaf: Sheikh Mohammed bin Hassan al Khazraji.

MINISTERS OF STATE

Finance: Ahmed Humaid al Tayer.

Internal Affairs: Hamouda bin Ali Dhairi.

Cabinet Affairs: Said al Ghaith.

Supreme Council Affairs: Sheikh Abdul Aziz bin Humaid al Qasbi.

Foreign Affairs: Rashid Abdullah al Nuaimi.

Without Portfolio: Sheikh Ahmed bin Sultan al Qasbi.

## Oil and gas finds boost state's income

### Sharjah

KATHY EVANS

THE discovery of oil and gas in Sharjah has transformed the emirate's financial status, the economy now showing slow but sure progress.

Striding from a lower wealth base than the other emirates, Sharjah has not been so damaged by the recession.

Old debts, notched up by the Government are gradually being paid off, and may now only amount to around \$400m, excluding the loans taken with a guarantee provided by Abu Dhabi.

The debts are largely owed to contractors, for work undertaken in the emirate, local banks and in respect of syndicated borrowings.

By 1986, Sharjah could be showing a modest surplus for the first time in many years.

Revenues from condensate and gas are estimated to be \$550m to \$625m for last year, based on a production average from the Sajaa field of about 45,000 b/d. Output from the field is presently about 60,000 b/d and is not included by the UAE in its Opec quota.

The revenue is derived entirely from taxes and royalties paid by Amoco, which holds an old-style concession agreement with the Sharjah government.

There has not been the boom in Sharjah which is normally associated with the discovery of hydrocarbons. The emirate's commercial sector has always had a tighter time than other states in the union, and local banks have always been slightly more conservative.

Rents are still falling in the emirate, and a luxury villa can be picked up for Dh 60,000 (\$16,300) a year, the price of a modest apartment in Abu Dhabi. Local banks also report a noticeable drop in letters of credit, and major contracting firms are said to be packing their bags, leaving behind representatives to collect debts.

Expenditure by local government has been kept at fairly modest levels, say bankers. There have been some small projects started on the east coast, a dam is being built by McAlpine, and the Emir's Guard has been increased. But otherwise, revenues have been put to paying off all of the emirate's creditors.

An indication of the new confidence with which international bankers see Sharjah came recently with a \$30m syndicated loan made by a

group of Japanese banks for the government's shareholding in a LPG (Liquid Petroleum Gas) facility. This time, no guarantee was needed by Abu Dhabi.

The Sajaa find has not only brightened Sharjah's economic prospects, but it has provided a certain degree of political muscle, particularly when it comes to dealing with its neighbour, Dubai.

Dubai has expressed interest in constructing a pipeline from Sharjah to pump gas from the Sajaa field to Dubai's local power stations. In Dubai's view, this would preferably be done before Sharjah goes ahead with its own LPG plant. Sharjah, however, is looking for a price of around \$3.50 per million BTU's, arguing that it is willing in return to allow Dubai to sign a pay-for-what-you-take agreement.

Alternative

As one Sharjah official commented "Our argument is that we have provided and built a facility to provide gas for a two month peak." (Electricity demand, and therefore gas, demand peaks in the summer months with the use of air conditioning.) This is being offered as an alternative to a straight commitment to buy a constant amount.

Dubai's response so far is to offer \$0.50 per million BTU's. Unofficial sources indicate that some compromise could be struck between the two, over territory which may include a slice of the Margham field. The Margham field in Dubai has long been the subject of a dispute between Dubai and Sharjah.

The future direction of Sharjah's gas sales are irretrievably bound up with federal politics. In theory, Emirates General Petroleum Corporation has a monopoly over the distribution of gas when it is replacing fuel oil in power stations.

Sharjah officials say they are now paying EGPC to provide gas to local power stations in the emirate. The arrangement is supposed to be only temporary and is due to funding difficulties of the federal government from which the money for subsidies comes.

Sharjah's only other customer for the gas is Ras al Khaimah, but here, EGPC pays Amoco (the owner of the gas) the equivalent of \$3.50 per million BTU's and charges Ras al Khaimah \$4.50. However, money to pay the bill has been slow to come through from the federal government, and Ras al Khaimah power stations have been forced to close for up to seven hours a day.

Local economists in Sharjah despair of such developments "If we don't use the gas today it won't be here tomorrow. There wouldn't be these difficulties if there was a federal energy policy for the whole country," commented one official. In the meantime, the gas from the Sajaa field continues to be largely flared, providing a spectacular sight for desert drivers for miles around.

Another possible user of Sharjah's gas is Shesco, a semi-government limited liability company established to encourage industrial development in the emirate.

Shesco's only project so far is a steel pipe manufacturer, in which Saeed Khoury of GOC has a 20 per cent stake.

The plant was only commissioned in July and has already received orders from Adnoc. However, Shesco is also investigating various industries which could use Sharjah's gas as feedstock.

So far, these attempts have been abortive, largely because of disputes on the cost of the feedstock. An ammonia project with C and F Chemie ran into trouble when the French company said that it would only accept to pay \$0.50 per million BTU's cost.

The minimum Sharjah said it would go to was \$1.50. However, another project for a carbon black plant is being studied by Stone & Webster with a Swiss company. Carbon black is used for newsprint.

Another project under study is a carbon monoxide plant. Altogether Shesco is currently studying five industrial plants, and was recently successful in luring Hyundai to the emirate. Hyundai is planning an electrical pipe factory with a view to re-exporting to the Gulf, Pakistan and India.

Sharjah's other major industry is tourism, and European, mainly German, tourists continue to flock to the emirate in search of guaranteed winter sun.

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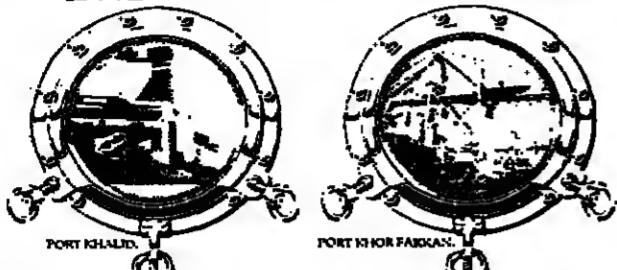
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## United Arab Emirates 8

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## Gas Projects

Several major gas projects in the UAE became operational in 1984. Angela Dixon has compiled the following list which shows these and other gas schemes, including gas development and supply projects, and industries using gas as feedstock.

Abbreviations: b/d-barrels per day, mmscfd-millions of standard cubic feet per day, ADNOC-Abu Dhabi National Oil Company, ADCO-Abu Dhabi Company for Onshore Operations, ADMA-OPCO-Abu Dhabi Marine Operation Company, JODCO-Japan Oil Development Company.

### ADGAS

(Abu Dhabi Gas Liquefaction Company Ltd.)

Ownership: ADNOC 51 per cent; Mitsui and Mitsui Liquefied Gas 24 per cent; BP 16 per cent; CFP 8 per cent. Produces Liquefied Natural Gas (LNG) and Liquefied Petroleum Gas (LPG). Share capital: \$105m.  
Construction: Bechtel/Chiyoda. Began 1973, completed 1977, cost \$500m. CBI Constructors Ltd. are building three new LNG and four LPG storage tanks on Das Island with overall project cost of \$550m. ADGAS raised a syndicated loan of \$500m in 1983 to help finance this project. Completion scheduled for 1985.  
Raw materials: Associated gas from the offshore fields of Zakum and Umm Shaif; for the past two years, while production from the fields has been low, cap gas from the Uweinat condensate reservoir has supplied 50 per cent of feedgas. Some associated gas is also received from Al Bunduq oilfield.  
Payment for raw materials: Three gas payments, one of which is pre-allocated. The other two are for use of facilities. These consist of a fixed fee (\$16m for ADMA-OPCO and \$63m for ADNOC), plus a small variable element.  
Products and capacity: Two liquefaction trains are designed to produce:  
LNG: 2.3m tonnes a year. Propane: 650,000 tonnes a year. Butane: 320,000 tonnes a year. Propanes plus: 220,000 tonnes a year. Recent improvements have raised the capacity of each train from 150 tonnes to 185 tonnes an hour.  
Marketing: Products marketed by the company, with the exception of Pentanes Plus, which is marketed by ADNOC. Tokyo Electric Power Co. (TEPCO), is committed under a 20-year Agreement to purchase 2,057 million tonnes a year of LNG and 500,000 tonnes a year of LPG.  
Pricing: Official Murban crude price in \$ per barrel converted to \$ per mmscft plus a freight element. The latter works out at around 20 per cent of the price. Price at time of writing is around \$3.25 mmscft. Price automatically rises and falls with price of Murban.  
Government income: Profit-related gas payment mentioned above paid to ADNOC. Tax of 55 per cent is payable after expenses. Remainder goes to shareholders pro rata.

### GASCO

(Abu Dhabi Gas Industries)

Ownership: Shareholders: ADNOC 68 per cent; Shell 15 per cent; CFP 15 per cent; Partex 2 per cent.  
Construction and financing: On stream September 1981. Construction management by Bechtel and Fluor. Cost \$2.1bn. Project was financed 20 per cent share capital, 80 per cent by loans. \$1.6bn loan from Abu Dhabi Investment Authority (ADIA). One repayment schedule of 7 1/2 years, the second (for \$400m) over 10 years. A further \$25m was raised through the National Bank of Abu Dhabi to finance capital expenditure in 1983.  
Raw materials: Associated gas from three onshore oilfields, Bab, Bu Hasa and Asab. Extraction plants at each of these fields separate gas from oil, then separate methane from NGLs. The former goes into ADNOC's methane system, the latter are sent to Ruwais for fractionation into LPG, and exported. A \$150m project at the Bu Hasa plant was recently completed. Expected to bring extraction rate up to the levels of efficiency of plants at Bab and Asab.  
Payment for raw materials: No charge for the gas. ADNOC pays nothing for methane.  
Design capacity and products: Fractionation plant designed to produce Propane, 24,000 b/d; Butane, 28,000 b/d; Pentanes Plus, 42,000 b/d. Plant was designed for a throughput of one million b/d for oil. Oil production quota reduced to 500,000 b/d in March 1983. Onshore fields have recently averaged as little as 360,000 b/d. GASCO's production accordingly affected. Efficiency of extraction has been improved so as to raise the percentage of gas recovered to around 97 per cent.  
Product prices: Going market rates, related to Saudi prices.  
Marketing: Done by individual shareholders. Shell and CFP sell own shares of output. ADNOC markets own and Partex's share. Most Propane and Butane sold to Japanese under medium-term (about five years) contracts. Heavier NGLs used as light oil product in shareholders' own product marketing system or sold on open market.  
Government income: ADNOC, Shell and CFP have five-year tax holiday. Thereafter all three will pay tax to government on profits and will make supplementary payments beyond a certain level. Operating costs include quite heavy loans service charges.



The new ADGAS headquarters on the Abu Dhabi Corniche—built by Costain International

### DUGAS

(Dubai Natural Gas Company)

Ownership, construction and financing: Owned 100 per cent by Dubai Government. Operated by Scimitar Oil. Construction by McDermott International. On stream April 1980. Cost \$500m. Finance entirely guaranteed by Dubai Ruler. In 1984 Dugas completed a US\$140m expansion to its gas recovery scheme.  
Raw materials: Associated gas from Fateh and South West Fateh fields offshore plus unassociated gas from condensate reservoirs below offshore Rashid field. Production separated at an offshore separation plant, resulting NGLs and dry gas pumped to Jebel Ali fractionation plant.  
Price of raw materials: Gas provided free. Methane transferred to Dubai Aluminium (DUBAL), without charge.  
Capacity and products: Initial capacity was 100 mmscfd. 1984 expansion has increased that to 250 mmscfd. In late 1984, 150-155 mmscfd of inlet gas was being processed—along with a content of around 14,000 b/d on NGL to produce 825-850 tonnes per day of propane, 600 tonnes per day butane and 850-900 tonnes per day of condensate. Residue gas used as fuel amounts to 105-110 mmscfd. This supplies around 90 per cent of Dugal's (i.e. Dubai Aluminium) fuel requirements, and around 5 per cent of Dubai Electricity Company's requirements.  
Marketing: By Scimitar. Emirates Gas Bottling Co. takes small amounts. Five-year contract with C. Itob for LPGs, to be renewed 1985.  
Price: Negotiated price formula which takes account of market rate, mainly Saudi.  
Government income: Balance, after operating costs and debt servicing, is paid to the Government of Dubai.

### FERTIL

(Ruwais Fertiliser Industries Abu Dhabi)

Ownership: Company formed 1980, with a capital of \$75m ADNOC 66.8 per cent; CFP 33.3 per cent.  
Construction and financing: Chiyoda banded over to Fertil end-August 1984. In 1983, a \$70m facility was raised to finance part of the project, with a grace period of 18 months, to be repaid thereafter in approximately fourteen semi-annual instalments.  
Raw materials: Project designed to utilise gas from Abu Dhabi's onshore fields both as fuel and feedstock, in the manufacture of ammonia and urea for export.  
Payment: ADNOC charges between \$3.5 and \$4.00 mmscft. Design capacity: 1,000 tonnes per day of ammonia as well as 1,500 tonnes per day of urea, from a consumption of 1.3m cu. metre per day of feedstock.  
Marketing: First shipment was made January 1983. Fertil markets own product. Contracts have been negotiated with India, for one-half of production (up to 225,000 tonnes per year), and China for a progressive increase up to 80,000 tonnes per year. Mitsubishi has agreed to purchase the remainder. The latter two contracts are for seven years.  
Pricing: Follows market. Fourth quarter 1984 price was \$175 per tonne; has been \$110 per tonne.  
Government income: Five-year tax holiday from startup. Shareholders receive dividends.

### EGPC

(Pipeline network to northern emirates power stations and industries: Sharjah)

Ownership, construction and financing: Amoco Sharjah (subsidiary to \$ per mmscft plus a freight element. The latter works out at of onshore Sharjah from the Sharjah government. Gas and condensate discovery made late 1980 on the Sajsa field. Production owned by Amoco Sharjah. Owner of the gas pipeline network is the Emirates General Petroleum Corporation (EGPC). EGPC is 100 per cent federal-government owned. Authorised share capital \$815m. Paid up \$109m.  
Cost of network: \$180m network financed by a loan of \$32m, raised by EGPC, the rest by means of supplier credits.  
Construction: Consultancy: Pipeline Engineering GmbH of Frankfurt. Construction by Dodsai of Frankfurt, begun 1983. Sharjah's Laysa and Dams power stations now receiving around 80 mmscfd. Power stations in Ras al Khaimah, Ajman, Fujairah and Umm al Quwain in process of being hooked in.  
Payment for raw materials: Amoco Sharjah has agreed with EGPC a price of \$3.30 mmscft until 1987. Thereafter it will be fuel oil energy equivalent price less one dollar.  
Capacity and products: Condensate at around 80,000 b/d is being produced and exported by Amoco. About 80 mmscfd of this is used by power stations in Sharjah, a minor amount is piped to Ras al Khaimah and the rest is flared. In future it is intended that this gas will go partly into the EGPC grid and partly to the Shalco LPG plant. Gas production capacity of the field at present is around 40 mmscfd from 15 producing wells.  
Marketing: Under discussion. EGPC provides gas to Ras al Khaimah, free, other emirates not clear as yet. Gas to be paid for at cost to EGPC by Federal subsidy. No payments as yet made at time of writing. Condensate: Amoco Sharjah takes up to 80 per cent for its own refineries in the U.S. The remainder is sold to customers, mainly Japanese.  
Pricing of output: Under discussion. As above. Condensate pricing follows market trends. At time of writing (December 1984), around \$26.85 per barrel.  
Government income: Government receives royalties (44 per cent) and tax (77 per cent) from Amoco. Federal government will be enabled to export Abu Dhabi diesel oil now being used, and in addition will cut down on fuel oil imports. Total savings of \$261m were originally envisaged.



BP tanker moored in front of the DUGAS plant at Mina Jebel Ali

### THAMAMA

Ownership, construction and financing: Owned 100 per cent by ADNOC. Design engineering and construction management by Fluor Corporation, at a cost of around \$450m. On stream April 1984. Financed by ADNOC.  
Raw materials: Non-associated gas from the Thamama C structure of the onshore fields.  
Capacity and products: Gas gathering system 50 km long on the Bab field and processing facilities at Babban. Four separate trunklines connect 19 gas wells. Sweet gas from the processing plant is sent to Ruwais and Abu Dhabi for use as fuel and feedstock for utilities and industries through existing gas lines of ADNOC's methane grid. Design capacity: 450 mmscfd gas throughput producing 375 mmscfd of sweet gas, 350 b/d of NGL, 26,000 b/d of stabilised condensate and 300 tonnes/day of concentrated sulphur. Peak gas production from Thamama C was 265 mmscfd in August 1984. Expected peak for 1985 is 350 mmscfd.  
Operators: ADCO operates the gas gathering section, ADNOC the remaining facilities.  
Pricing: ADNOC charges the fertiliser factory, FERTIL, at Ruwais around \$4 mmscft for feedgas and fuel, and charges \$3.50 mmscft to WED (Water and Electricity Department) for the use of fuel gas from ADNOC's Methane System, of which Thamama C now forms a part.  
Government income: Savings achieved through diminished use of fuel oil.

### SHALCO

(LPG Plant Sharjah)

Ownership: Shareholding as follows: Sharjah government, 60 per cent; Amoco Sharjah, 25 per cent; Tokyo Boeki and C. Itob, 7 1/2 per cent each.  
Financing and construction: Cost of construction around \$300m. There is a debt-equity ratio of four to one, i.e. 80 per cent debt. 20 per cent equity partners' finance. The major part of the 80 per cent debt is to be met by Japan's Eximbank. Sharjah raised \$30m five-year credit to cover its share of the investment.  
Construction: Turnkey contract to Japan Gasoline Company. Began on 27th October 1984 with the foundations for the two tanks at Hamriya port, one for propane and one for butane. Expected completion date 1986. There will also be a new port at Hamriya for loading the products.  
Raw Materials: Gas from the Sajsa field.  
Payment for raw materials: A fixed fee, plus a small variable element based on profits will be paid to Amoco—Sharjah.  
Capacity and products: Expected to produce 13,000 b/d of mixed LPGs, 7,500 b/d of propane and 6,000 b/d of butane. The plant will also produce an extra 1,500 b/d of condensate, due to more efficient extraction.  
Marketing: C. Itob has agreed to dispose of product to its own outlets on a take-or-pay, ten-year basis.  
Pricing: Formula based on prices in the region, basically Saudi. Government income: Government's own equity shareholding, plus royalties on the fee which LPG Shalco will pay Amoco Sharjah for extracting. No royalties payable on products.

### MARGHAM FIELD

(Gas/Condensate Development: Dubai)

Ownership, construction and financing: Concession owned 2/3 Arco Dubai Inc., a subsidiary of Atlantic Richfield, and 1/3 by Britoil (since 1981). Gas/condensate discovery made May 1982. Construction: gas gathering network designed by Fluor Corporation. Contractors: Dodsai, Mina Jebel Ali Construction and CCC Wescon. Cost of around \$600m financed by partners.  
Capacity and products: Gas and condensate. Gas produced at around 350 mmscfd, now being flared. Condensate—25,000 barrel per day. Gas will be re injected to optimise recovery of condensate. Gas comes out at 2,200 psig, is reduced to 800 psig for extraction of NGLs, then pressurised through two \$20m compressors to 7250 psig for re injection. Twelve wells drilled to Margham structure. Drilling to recommence in 1985. Dry hole at Kuba 1984.  
Design capacity: The system has a design capacity of 350 mmscfd of gas from which the condensate is sent along a 40 km pipeline to Jebel Ali where the storage tanks and a loading terminal are situated from whence it is exported. 400,000 barrels exported in November. Taken by Mitsui of Japan, who have contracted for a further 400,000 in December. Contracts still in the negotiating stage until quality of condensate are assessed.  
Marketing: Companies pro rata.  
Pricing of output: Negotiable.  
Government income: Tax and royalties. Said by officials to conform to practice in the region, i.e. 85 per cent tax, 15 per cent royalties.  
Territory: A portion of the Margham field lies on land which the Sharjah government considers to be south-western Sharjah. There have been reports that an Amoco seismic team was arrested by Dubai authorities in 1982. Although an arbitrator was appointed, a decision on border, the matter has not yet been resolved.  
Development of gas from Khuff Zone at Umm Shaif (Abu Dhabi)  
Ownership, construction and financing: Abu Dhabi Government owns all gas in the emirate; development will be ADNOC's responsibility 100 per cent. Contract awarded to Bechtel UK in 1984 for engineering on Khuff development beneath Umm Shaif. Estimated to cost around \$60m. Drilling to the Khuff is very expensive because of depths of 15,000 ft plus. ADMA-OPCO has already drilled four wells to the Khuff under Umm Shaif. Gas has a methane content of 85 per cent. H2S content of 1.5 per cent, CO2 content 4 per cent.  
Development plan: Present plan is to re inject Khuff gas into the Uweinat reservoir at Umm Shaif. Uweinat is a condensate reservoir with a gas cap. The latter has been used hitherto to supplement associated gas as feedgas from offshore fields to the ADAS LNG plant. Present plan will allow this practice to continue while maintaining pressure for condensate extraction. It is expected to have the added advantage of avoiding the need for extra facilities for extracting impurities from Khuff gas.  
Government income: ADGAS will continue to make gas payment as at present.

### KHUFF EXPLORATION

Khuff gas exploration (Abu Dhabi)

Zakum: Concession: ADMA-OPCO (80 per cent ADNOC—144 BP; 134 CFP; 12 JODCO). Khuff gas has been encountered at Zakum. Drilling carried out by ADMA-OPCO. Decision not to develop as impure.  
Abu al Bukhoos: Concession: CFP 51 per cent; New England Petroleum Exploration Co. (U.S.) 24.5 per cent; Amerasia Hess 12.25 per cent; Sunningdale Oil Co. 12.25 per cent. One well drilled to Khuff Commercial quantities of good quality gas. Another well being drilled by Zakum Development Co. on this field.  
Hail: Concession: ADCO (60 per cent ADNOC; 40 per cent BP, CFP, Exxon, Mobil, Partex and Shell). Commercial quantities found at Hail, an offshore artificial island. Drilling carried out by ADCO. Onshore Khuff has been disappointing, with three dry holes.  
Satah: Concession: UDECO. Shareholding: ADNOC/JODCO 50/50. One well drilled to Khuff. This will be re injected the oil-bearing strata when the field comes on stream early 1985, with a planned 25,000 b/d.

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